Subject Index

A

ACETATE

inhibition of triacylgiycerol lipolysis in perfused heart from streptozotocin-diabetic rats, 720–722

ACID

arachidonic
metabolism in diabetics, 16*, 17*,
622–625
linoleic and linolenic
rat aortic rings prostacyclin synthesis
and, 217–220

ADENINE NUCLEOTIDE TRANSLOCASE

rat islet mitochondrial insulin secretion regulation and, 793–797

ADENYLATE CYCLASE

platelet activity diabetes and, 48* sensitivity to isoproterenol in mononuclear leukocyte plasma membranes from insulindependent diabetics, 825–828

ADIPOCYTES

insulin binding studies in, 697–704 isolated rat kinetics of insulin receptor biosynthesis and membrane insertion in, 319–324

of non-insulin-dependent diabetics with reduced glucose tolerance insulin binding and responsiveness in, 748–753

plasma membranes of anti-insulin antibody aggregation of insulin-occupied receptor sites by, 648–653

degradation of insulin receptors in, 1001–1008 structure of insulin receptors of, 760– ADIPOSE TISSUE. See also Adipocytes effects of body composition on insulin sensitivity and, 965–968

human

effects of aging on insulin receptor binding and metabolic effects of insulin on, 959–964

of obese and lean mice

effect of ciglitazone on glucose and lipid metabolisms and insulin binding in, 839–845

omental and subcutaneous

receptor and post-receptor levels after insulin-induced lipolysis in, 117– 123

of rats with impaired glucose tolerance overfeeding and cellularity of, 1023– 1026

of rats and rabbits

effects of polyethylene glycol insulin on, 953–957

α-ADRENORECEPTORS

rat myocardium effects of streptozotocin diabetes on, 881–885

B-ADRENORECEPTORS

adenylate cyclase system of heart and lymphocytes from streptozotocindiabetic rats

isoproterenol sensitivity and, 1110-1115

glucose counterregulation in insulindependent diabetes and, 887– 893

of mononuclear leukocytes in insulindependent diabetics, 825–828 rat myocardium

effects of streptozotocin diabetes on, 881–885

AEROSOLS

insulin-bile salt, intranasal insulin administration with, 1040-1047

AGE

aldosterone biosynthesis in diabetics and, 1–4

hyperlipemia in insulin-dependent diabetics and, 22 red blood cell pyruvate kinase activity assays and, 1017–1021 -stimulated changes in intact rat dermal

collagen streptozotocin diabetes and, 739–742

AGING

and insulin receptor binding and metabolic effects of insulin on human adipose tissue, 959–964 insulin secretion and action in rats and, 175–179

regenerative capacity of rat pancreatic β-cells and, 14–18

ALANINE

ingested and intravenous forearm uptake in normal man, 977– 980 metabolism

β-hydroxybutyrate infusion in man and, 197–205

ALBUMIN

glomerular filtration in insulin-dependent diabetics, 92–95*

glucosylated and normal human or rat binding to renal basement membrane of diabetic and control rats, 380–382

and insulin microbeads implanted in streptozotocin-diabetic rats slow insulin release from, 478–480

ALBUMINURIA

early detection of diabetic nephropathy and, 83* incipient diabetic nephropathy and, 1*

ALDOSE REDUCTASE INHIBITORS

sorbinil

effect on metabolite level in lenses of diabetic rats, 482–485 chronic painful diabetic neuropathy and, 938–942

ALDOSTERONE

biosynthesis in diabetics, 1-4 plasma

responsiveness to angiotensin II or corticotropin in nonazotemic diabetics. 1–4

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1–100 April, 293–386 February, 101–195 May, 387–487 March, 197–292 June, 489–584 Supplement 2, 1–104 July, 585–684 August, 685–780

^{*}This index covers all reading matter in Volume 32 of DIABETES except the abstracts of papers presented at the 43rd Annual Meeting of the American Diabetes Association. An asterisk is used to indicate material that appeared in Supplement 2, Proceedings of a Conference on Diabetic Microangiopathy.

ALLOXAN DIABETES

in dogs

fetal and neonatal metabolism in pups of, 352–358, 360–367

hypophysectomy and glucoregulatory mechanisms in, 26–32

in rats

comparison of isometric contractions in fast and slow muscle of, 1035–1038

effect of aldose reductase inhibitor on lens metabolites in, 482–485 effect of poly (ADP-ribose) synthetase

inhibitor on islet proinsulin synthesis in, 316–318 nonenzymatic glycosylation of CNS

myelin components in, 670–674 transplantation of fetal rat islets into cerebral ventricles of, 852–857

AMERICAN DIABETES ASSOCIATION

Annual Meeting Awards Forty-third, 7, XIX Annual Meetings

Forty-fourth, 879, 1188 Annual Symposium

Thirty-first, 880, 1188 Clinical Diabetes newsletter, 192 Feasibility Grant Program, 99, 975, 1082 Lilly Award, 974, 1082

New Members, 99, 192, 486, 584, 879, 974, 1082, **4,** XXI, **7,** XIX, **8,** XV

Organization Section, 99–100, 192, 486–487, 584, 879–880, 974– 975, 1082, **4,** XXI, **7,** XIX, **8,** XV, 1188

Professional Symposium of Northern Illinois affiliate, 880

Research and Development Award, 879–880, 974–975 Reviewers of Manuscripts, 193–195

AMINO ACIDS

aromatic and branched-chain in streptozotocin-diabetic rat blood and brain, 222–230

hepatic, in pups of canine diabetic mothers, 366–367

hypersensitivity

and insulin release from perfused pancreas from streptozotocindiabetic rats, 445–451

AMINOPHYLLINE

insulin response in obese mice to oxytetracycline and, 932–937

AMYLASE

secretion by isolated pancreatic acini from streptozotocin-diabetic rats insulin and, 241–245

AMYLOIDOSIS

continuous subcutaneous insulin infusion and, 88–90 insulin infusion in dogs and, 1092–1100

ANGIOGRAPHY. See Fluorescein angiography

ANGIOTENSIN II

plasma 18-hydroxycorticosterone and aldosterone responsiveness to in nonazotemic diabetics, 1–4

ANIMAL MODELS. See also under specific animals, i.e., Mice; Rats of autoimmune, insulin-dependent diabetes, 247–253

spontaneously diabetic rats, 326–329 of proinsulin biosynthesis and noninsulin-dependent diabetes, 277–282

ANTIBODIES

anti-insulin

abnormal glucose counterregulation in insulin-dependent diabetes and, 134–140

aggregation of, at insulin-occupied receptor sites on liver and adipocyte plasma membranes, 648–653

in basement membrane–related antigen studies in diabetic nephropathy, 34–39*

complement-fixing cytoplasmic islet cell and insulin secretion in insulindependent juvenile diabetics, 743-746

feedback inhibition of insulin release by insulin and, 1162–1167 to glucosylated collagen, 1182–1189

immune response gene products suppressive effects on development of streptozotocin diabetes in

mice, 869-871

to insulin

in insulin immunogenicity study, 596– 598

species of origin of insulin and, 595 islet cell

inhibition of insulin release in diabetic children, 520-523

quantitation with ¹²⁵-I-protein A in insulin-dependent diabetics and normals, 460–464

monoclonal

and abnormalities of T-lymphocytes in insulin-dependent diabetics, 91–93

ANTIGENICITY

of glucosylated collagen, 1182-1189

ANTIGENS

basement membrane—associated in diabetic nephropathy, 34–39* complement poly-C9 diabetic vascular disease and, 2* factor VIII-related diabetes and, 4*

ANTIHYPERTENSIVE AGENTS

diabetic nephropathy and, 69-70*, 72-73*, 86-87*

ANTILYMPHOCYTE SERUM (ALS)

effects on spontaneously diabetic rats, 326–329

and T-cell activity in spleens of diabetic and normal mice, 159–163

ANTIPLATELET AGENTS

diabetic vascular disease and, 18*

APOLIPOPROTEIN

plasma levels

metabolic control in insulin-dependent diabetics and, 20-24

ARACHIDONATE

incorporation into phospholipids of isolated rat pancreatic islets, 6– 12

ARACHIDONIC ACID

metabolism in diabetics, 16*, 17*, 622–625

in rat pancreas islet prostaglandin synthesis and insulin secretion studies, 509–514

14C-ARACHIDONIC ACID

conversion to prostacyclin and/or thromboxane in streptozotocindiabetic rat tissues

effects of insulin or tolbutamide on, 846–850

ARGININE

and insulin release from streptozotocindiabetic perfused rat pancreas, 448–449 stimulation of rat islets

chloride and, 416–423

ARTERIES

asymptomatic insufficiency in diabetics plasminogen activator release and, 4* glucose and insulin concentrations after ingested and intravenous glucose loading, 977–980 prostacyclin production in diabetics, 17* resting and exercise blood flow in insulin-dependent diabetes and, 664–669

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE April, 293–386 Supplement 2, 1–104

January, 1–100 April, 293–386
February, 101–195 May, 387–487
March, 197–292 June, 489–584

PAGE NUMBERS BY ISSUE Supplement 2, 1–104 July, 585–684 August, 685–780

ASCORBIC ACID

in human mononuclear leukocytes hyperglycemia-induced intracellular depletion of, 1078–1080

ATHEROSCLEROSIS

capillary basement membrane thickening in diabetics and, 96– 99* diabetic hemorrheology and, 62*

hyperlipemia in diabetics and, 20

AUTOIMMUNE DISEASE

anti-islet immunity and thymic
dysfunction in genetically
diabetic mice, 1048–1053
and spontaneous diabetes in rats
effects of glucocorticoids, cyclosporinA, and antilymphocyte serum in,
326–329

B

BASEMENT MEMBRANES

capillary diabetes and, 96-99* glomerular lesions after kidney transplantation in diabetics, 948-952 thickening in diabetes, 37-38* thickening in diabetic nephropathy, 52* glomerular mesangial regions long-term diabetes and, 79-82* muscle capillary in diabetic monozygotic twins, 549in identical twins discordant for insulin-dependent diabetes, 557-560 polyantigenic expansion of constituents diabetic nephropathy and, 34-39* renal, of diabetic and control rats albumin binding studies in, 380-382

BIGUANIDE

thickening

-associated lactic acidosis, 187-189

diabetes duration and, 2*

diabetic retina and, 21*

BILE ACIDS

homeostasis
effect of alterations in sterologenesis
in diabetic rats on, 368–376
intestinal uptake in streptozotocindiabetic rats, 900–906
synthesis in streptozotocin-diabetic rats
hyperphagia and, 811–818

BLINDNESS

diabetic retinopathy and, 20*

BLOOD

amino acids
in fetal and neonatal pups of diabetic
canine mothers, 355–356
arterial

glucose, lactate and alanine in normal man after ingested or intravenous glucose loading, 977–980

erythrocytes deformability in diabetics, 60° ghosts, measurement of insulin binding by, 644–647 membrane fluidity in diabetics, 585– 590

fibrinolytic activity in diabetics autonomic neuropathy and, 4–6* flow

diabetes and, 56–62* near subcutaneous insulin injection sites in stable and brittle diabetics, 466–473

resting and exercise hyperemic pulsatile, in insulin-dependent diabetics, 664–669 glycerol, lactate, and pyruvate

diabetic ketosis and, 389–390 human mononuclear leukocytes hyperglycemia-induced intracellular ascorbic acid depletion, 1078– 1080

platelets, see Blood platelets red cell deformability capillary basement membranes and, 99*

red cell deformability and platelet aggregation insulin therapy in diabetics and, 88– 91*

red cells and monocyte pyruvate kinase activity insulin receptors and, 1017– 1021

samples from pancreatectomized dogs in sulfated insulin infusion and plasma glucose study, 788–791 streptozotocin-diabetic rat aromatic and branched chain amino

acids and, 222–230 viscosity measurement in diabetes, 57– 61*

BLOOD GLUCOSE

489-491

pump treatment, 911–913 in fetal and neonatal pups of diabetic canine mothers, 354–355 fetal pancreas transplantation in diabetic rats and, 730–733 glucose infusion in newborn infants and,

control during portable insulin infusion

intranasal insulin administration with insulin-bile salt aerosol and, 1040–1047

levels

hypophysectomy in alloxan-diabetic dogs and, 26–32 recovery after insulin-induced hypoglycemia in insulindependent diabetics, 493–498

BLOOD PLATELETS

adhesiveness and aggregation in diabetics, 4* aggregation

insulin action in diabetics and, 88–91* arachidonic acid metabolism in diabetics, 16, 17*

and insulin or tolbutamide treatment in streptozotocin-diabetic rats, 847-850

changes in diabetes, 2* function

metabolic control in diabetes and, 16– 17* microvascular disease and, 14–18*

function and enzyme activities endothelial damage in diabetics and, 47–50*

monoamine oxidase activity in diabetics and nondiabetics, 130–132

plasma interactions, see Plasma-platelet interactions

BLOOD PRESSURE. See also

Hypertension diabetic nephropathy and, 68*, 83–87* systolic diabetes and, 5*

BLOOD-RETINAL BARRIER

alteration of diabetic control and, 26° in diabetics retinopathy and, 20–27*

BLOOD SUGAR

red cell deformability and platelet aggregation and insulin therapy and, 88–91*

BODY

composition
insulin sensitivity and, 965–968
extremities
autonomic neuropathy in diabetics
and, 4–6*
forearm, uptake of glucose and
glucogenic substrate in normal
man
ingested vs. intravenous glucose
loading and, 977–980
omental and subcutaneous fat
antilipolytic action of insulin and, 117–

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

 January, 1–100
 April, 293–386

 February, 101–195
 May, 387–487

 March, 197–292
 June, 489–584

Supplement 2, 1–104 July, 585–684 August, 685–780

total carbohydrate and lipid oxidation rates

and obesity and diabetes, 982-987 weight

insulin and insulin-like growth factor I effects on protein synthesis in muscle from obese and lean mice, 392-396

BONES

skeletal malformations in offspring of streptozotocin-diabetic rats, 1141-1145

BRAIN

aromatic and branched chain amino acids

in streptozotocin-diabetic rats, 222-230

cerebral ventricles

transplantation of fetal rat islets into, in alloxan-diabetic rats, 852-857

CALCIUM

effects on measurement of insulin binding by erythrocyte ghosts, 645-647

fatty acid incorporation into islet phospholipids and, 12

fluxes in rat islets

chloride modulation of, 416-423 insulin secretion and

calmodulin-binding proteins and, 1126-1132

ions

impaired glucose-induced insulin release from cultured rat islets and. 993-999

mobile, in B-cells of rat pancreatic islets fasting and insulin secretion and, 235-240

ultrafilterable

renal tubular reabsorption in diabetic children, 28-321

uptake and content of pancreatic islets of fed and fasted rats and obese hyperglycemic mice, 124-129

uptake by isolated rat islets of Langerhans dynorphin and, 685-689

CALCIUM IONOPHORE A23187

cell-to-cell communication in rat pancreatic islet monolayer cultures and, 95-98

CALMODULIN

-binding proteins in cloned rat insulinoma cell line, 1126-1132

CAPILLARIES

basement membrane changes in diabetics, 96-99*

glomerular

protein filtration and, 94* muscle basement membrane width in diabetic monozygotic twins, 549-555

in identical twins discordant for insulin-dependent diabetes, 557-560

rionperfusion

quantitative evaluation of fluorescein angiograms and, 8-13* retinal, changes in retinopathy, 21*

CARBOHYDRATE INTOLERANCE

insulin resistance and T-lymphocyte insulin receptors and, 712-717

CARBOHYDRATE METABOLISM

in obese non-insulin-dependent diabetic patients glycemic control and, 982-987

CCK RECEPTORS

from isolated pancreatic acini from diabetic rats insulin and enzyme secretion by, 241-

CELLS

endocrine

infant pancreas, 293-300 in fetal human pancreas, 293-300 and intracerebral allotransplantation in streptozotocin diabetic rats, 1185-1187

fat, from non-insulin-dependent diabetics with reduced glucose tolerance

insulin binding and responsiveness in, 748-753

human umbilical vein endothelial elevation of glucose concentration and Factor VIIIR:Ag in, 876-878 lactate transport across membranes, 184-185

CEREBRAL VENTRICLES

transplantation of fetal rat islets into in alloxan-diabetic rats, 852-857

CHINESE HAMSTERS

diabetic

ciglitazone studies in, 830-837 maternal spontaneous diabetes in developmental-stage-dependent teratogenic effects of, 637-642

CHLORIDE

modulation of rat islet secretions, 416-423

CHLOROQUINE

insulin binding

intracellular distribution and action in isolated mouse pancreas acini, 1102-1108

CHOLESTEROL

feeding in diabetic rats sterologenesis and, 368-376 metabolism

hyperphagia in streptozotocin-diabetic rats and, 811-818

plasma levels in non-insulin-dependent diabetics response to therapy, 525-529

CHROMATOGRAPHY

high-performance-liquid

and detection of degraded A14-125|insulin in human fibroblasts, 474-477

purification of monoiodotyrosol insulin isomers by, 705-710

ion exchange

and mannose phosphorylation by glucokinase from liver and transplanted insulinomas, 1146-

CIGLITAZONE

effect on glucose and lipid metabolisms and insulin binding in adipose tissue of mice, 839-845

reduction of insulin resistance in obese and/or diabetic animals by, 804-810

studies in obese and/or diabetic animals, 830-837

CIRCULATION

capillary basement membrane changes in diabetes and, 96-99*

CITRATE

hepatic

in pups of canine diabetic mothers. 363

CITRIC LYASE

after fetal pancreas transplantation in streptozotocin-diabetic rats, 730-733

CLONES

rat insulinoma cell line calmodulin-binding proteins in, 1126-

COLLAGEN

alucosylated antigenicity of, 1182-1189

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

rat dermal age-simulated changes in, streptozotocin diabetes and, 739–742

COMPLEMENT

-fixing islet cell antibodies insulin secretion in insulin-dependent juvenile diabetics and, 743–746 poly-C9 levels in diabetics, 2*

CONCANAVALIN A

glycosylated insulin complexed to closed-loop insulin delivery systems and, 499–504

CONGENITAL MALFORMATIONS

ketone body effects on mouse embryos and, 610–615 maternal diabetes and role of insulin and insulin therapy,

1070–1073 maternal spontaneous diabetes in Chinese hamsters and, 637–642

skeletal, in offspring of diabetic rats insulin withdrawal and, 1141–1145

CORTICOTROPIN

plasma 18-hydroxycorticosterone and aldosterone responsiveness to in nonazotemic diabetes. 1—4

CYCLIC AMP

levels in isolated rat islets of Langerhans dynorphin and, 685–689

CYCLOSPORIN-A

effects on spontaneously diabetic rats, 326–329

CYSTEAMINE

inhibition of somatostatin secretion in rats, 377–378

CYSTIC FIBROSIS

insulin-treated quantitative vitreous fluorophotometry and, 505–514

D

DAMAD STUDY, 8*

DEHYDROASCORBATE

transport, glucose transport and in human neutrophils and fibroblasts, 545–548

DELAYED HYPERSENSITIVITY REACTIONS

in nonobese diabetic mice, 248, 251– 253

DEXTRANS

clearance in diabetic nephropathy, 73-74, 75*

DIABETES MELLITUS

autoimmune, in nonobese mice abnormalities of cellular immunity in, 247–253

blood flow and, 56–62° blood platelet changes in, 2° blood-retinal barrier in retinopathy and, 20–27*

capillary basement membranes in, 96-99*

complement poly-C9 levels in, 2* complications collagen glucosylation and, 1182—

1189 continuous subcutaneous insulin infusion

very-low-density lipoprotein triglyceride metabolism and, 75– 80

continuous subcutaneous insulin infusion or bolus subcutaneous injections in

insulin pharmacokinetics and, 331-336

control

alteration of blood-retinal barrier and, 26*

genetic hypothesis of nephropathy and, 54-55*

lipid, lipoprotein, and apolipoprotein levels and, 20–24 nerve function in teenagers and, 142– 146

determinants of glomerular filtration of proteins in, 92–95* diagnostic criteria for, 343–351

duration basement membrane thickening and,

erythrocyte changes in, 2*

erythrocyte membrane fluidity levels in, 585–590

fibrin degradation by plasmin nonenzymatic glycosylation and reduction of, 680–683 glomerulopathy in, 79–82*

heart rate abnormalities in, 101–104 in Hopi and Navajo Indians prevalence of micorvascular

complications in, 894–898 hyperosmolality and insulin-mediated glucose metabolism and, 1028–1033

hypoglycemia and

insulin-glucagon relationships and, 575–582

impotence and

vasoactive intestinal polypeptide-like immunoreactive nerves in penis and, 1075–1077 incipient nephropathy and hypertension and, 1* insulin-dependent

abnormal glucose counterregulation in, 134–140

adrenergic contribution to glucose counterregulation in, 887–893 altered endothelial function in, 14–18* continuous subcutaneous insulin

infusion in, amyloidosis and, 88– 90 HLA study and rejection of recessive hypothesis of, 169–173

and human insulin of recombinant DNA origin, 516-519

and impaired counterregulation of hypoglycemia, 493–498

and long-term therapy with continuous subcutaneous insulin infusion pump, glucagon response to hypoglycernia and, 398–401

low somatomedin levels in, 1060-1068

monoclonal antibody-defined abnormalities of T-lymphocytes in, 91–93

mononuclear leukocyte β2-adrenergic receptors adenylate cyclase system in, 825–828

nocturnal insulin requirements in, pituitary-adrenocortical axis and counterregulatory hormones and, 403–407

platelets and vascular disease in, 14-18*

polmorphonuclear leukocyte thromboxane B2 and prostaglandin E production in, 622–625

quantitation of islet cell surface antibodies with ¹²⁵-I Protein A in, 460-464

recessive hypothesis for, 774–776 resting and exercise blood flow in, 664–669

insulin-dependent and non-insulindependent

platelet monoamine oxidase activity in, 130–132

insulin-dependent and resistant

and prediction of insulin requirements for portable insulin pump, 908– 913

insulin immunogenicity studies and, 592-598

insulin-induced hyperinsulinemia in T-lymphocyte insulin receptors and, 712–717

intranasal insulin adminstration with insulin-bile salt aerosol, 1040– 1047

ketosis-resistant, juvenile-onset suppressible glucagon secretion in, 1168–1171

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

DIABETES: VOL
January, 1–100 April, 293–386
February, 101–195 May, 387–487
March, 197–292 June, 489–584

Supplement 2, 1–104 July, 585–684 August, 685–780

ketotic

glucagon and ketone body production in. 387-391

kidney transplantation and and development of glomerular basement membrane and mesangium lesions, 948-952

metabolic control in platelet function and, 16-17*

in mice

defective oxidative metabolism of heart mitochondria from, 781-786

in monozygotic twins

muscle capillary basement membrane width studies in, 549-555

mutation in insulin gene and, 872-875 nephropathy and, see Nephropathy, diabetic

non-insulin-dependent

circulating somatostatin concentrations in, 723-729

counterregulatory hormone release and glucose recovery after hypoglycemia in, 1055-1059

insulin resistance and deficiency in diabetic retinopathy of, 82-87

metformin treatment and insulin receptor binding to monocytes. insulin secretion and glucose tolerance in, 1172-1174

obesity and carbohydrate oxidation and storage in, glycemic control and, 982-987

and obesity syndromes in mice, gastric inhibitory polypeptide abnormalities and, 433-434

with reduced glucose tolerance, insulin binding and responsiveness in fat cells from, 748-753

relationship between serum glucose level and glucose metabolic clearance rate in, 627-632

and response of plasma triglyceride, cholesterol and lipoprotein lipase to therapy, 525-529

very-low-density lipoprotein triglycerides in, 271-276

platelet enzyme activities and endothelial damage in, 47-50*

quantitative evaluation of fluorescein angiograms and, 8-13*

renal disease and, 1-2* renal disease stages in, 64-77* spontaneous in BB/W rats

effects of glucocorticoids, cyclosporin A, and antilymphocyte serum on, 326-329

stable and brittle

changes in blood flow near subcutaneous insulin injection sites in, 466-473

uncontrolled

effects of metabolic abnormalities on prostacyclin synthesis and, 217-220

red cell deformability and platelet aggregation in, insulin therapy and, 88-91*

virus-induced in autoimmune New Zealand mice, 755-758

DIAZOXIDE

serum insulin suppressibility by, in insulinoma patients, 921-930

treatment in rats

modulation of gap junction and dye coupling between B-cells of pancreatic islets of, 858-868

DIBUTYRYL CYCLIC AMP

glucose stimulation of beta-cell DNA replication in intact rats and islet cultures and, 1172-1176

DIET

and blood glucose and plasma insulinlike and somatostatin-like immunoreactivity in non-insulin-dependent diabetics,

726-727

cholesterol feeding and sterol synthesis in diabetic rats and, 368-376

effects of aging on insulin secretion and action in rats and, 175-179

exercise and

effects on triglyceride metabolism in rats with moderate insulin deficiency, 46-50 in fasted and fed streptozotocin-diabetic

rats glucagon and t3 metabolism study in,

glucose feeding in streptozotocindiabetic rats

798-803

effects on insulin-stimulated glucose uptake, 165-168

hyperphagia and alteration of cholesterol dynamics in streptozotocin-diabetic rats, 811-818

intestinal disaccharidase activity and in streptozotocin-diabetic rats, 265-270

and liver glycosyltransferases activity in streptozotocin-diabetic rats, 412-415

overfeeding in rats with impaired glucose tolerance

weight gain and brown adipose tissue cellularity in, 1023-1026 protein-containing in streptozotocin-

diabetic rats effect on blood and brain amino acids, 222-230

DIHYDROALPRENOLOL

binding to rat myocardium beta adrenergic receptors streptozotocin diabetes and, 881-885

1,25-DIHYDROXYVITAMIN D3

production by renal slices from streptozotocin-diabetic rats insulin and, 302-305

24,25-DIHYDROXYVITAMIN D3

production by renal slices from streptozotocin-diabetic rats insulin and, 302-305

DIPYRAMIDOLE

-aspirin in diabetic microangiopathy study. See DAMAD

DISACCHARIDASES

intestinal activity in streptozotocindiabetic rats, 265-270

DIURETICS

thiazide, glucose intolerance induced by maintenance of body potassium and, 106-110

DNA

recombinant

immunoreactivity of human insulin from, 516-519

replication, glucose-stimulated beta-cell in intact rat and islet cultures, 1172-1176

restriction endonuclease

identification of point mutation in human insulin gene and, 872-875

synthesis

in pancreatic β-cells, aging and, 14-18

DOGS

alloxanized and hypophysectomized glucoregulatory mechanisms in, 26-

fetal and neonatal metabolism in pups of diabetic mothers, 352-358, 360-367

insulin infusion in

amyloidosis and, 1092-1100

islet tissue from

proinsulin and insulin release from, 1162-1167

isolated perfused pancreas secretin inhibition of glucagon secretion in, 970-973

pancreatectomized

intravenous infusion of sulfated insulin and plasma glucose levels in. 788-791

prostaglandin synthesis inhibitors

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

glucagon and epinephrine stimulation of hepatic glucose production and, 439–443

reduction of insulin resistance by new anti-diabetic agent in, 804–810 reflux of islet-containing pancreatic fragments into splenic veins of normoglycemia after, 452–458 spontaneously diabetic

blood-retinal barrier changes and, 26°

DYNORPHIN

effect on insulin and somatostatin secretion, calcium uptake, and cyclic-AMP levels in rats, 685– 689

E

ELECTROCARDIOGRAM

heart rate abnormalities in diabetics and, 101-104

ELECTROPHYSIOLOGICAL STUDIES

of pH and glucose-induced electrical activity, 61

EMBRYOGENESIS

early, maternal diabetes and role of insulin and insulin therapy in, 1070-1073

rat pancreas development insulin gene expression in, 691–696 mouse

alterations in morphogenesis produced by β-hydroxybutyrate, 610–615

ENCEPHALOMYOCARDITIS VIRUS

 -induced diabetes in autoimmune New Zealand mice, 755–758

ENDOCRINE CELLS

infant pancreas, 293–300 pancreatic fractions from infants with erythroblastosis fetalis, 313–315 populations in fetal human pancreas, 293–300

ENDOCRINE GLANDS

function

in male streptozotocin-diabetic and semi-starved insulin-treated male rats, 112–115

B-ENDORPHIN

insulin secretion and, 685

ENDOTHELIAL CELLS

changes in retinopathy and, 20-21*

damage

platelet enzyme activities in diabetes, 47–50*

function in insulin-dependent diabetics microangiopathy and, 14*, 17* human umbilical vein

elevated glucose concentrations and Factor VIIIR:Ag levels in, 876— 878

ENDOTHELIUM

vascular

plasminogen activator production in diabetics, 4–6*

ENZYMES

glycogen synthase and synthase phosphatase in streptozotocin-diabetic rat liver, 1134–1139

liver

normalization in diabetic rats after fetal pancreas transplantation, 730–733

platelet

endothelial damage in diabetes and, 47–50*

secretion by isolated pancreatic acini from diabetic rats insulin and, 241–245

EPILEPSY

lactic acidosis and, 188, 189

EPINEPHRINE

plasma levels

in insulin-treated non-insulindependent diabetics, 1055–1059

in long-term streptozotocin-diabetic rats, 55–59

secretion

anti-insulin antibodies and glucose counterregulation in insulindependent diabetes and, 134– 140

impaired counterregulation of hypoglycemia in insulindependent diabetics and, 493– 498

 -stimulated hepatic glucose production prostaglandin synthesis inhibitors and, 439–443

ERYTHROBLASTOSIS FETALIS

pancreatic endocrine cell fractions in, 313-315

ERYTHROCYTES

deformability in diabetes, 2* insulin treatment and, 88-91*

ahosts

measurement of insulin binding by, 644–647 membrane fluidity levels in diabetics,

EUGLYCEMIC GLUCOSE CLAMP TECHNIQUE

585-590

effect of hyperosmolality on insulinmediated glucose metabolism in man, 1028–1033

evaluation of glucose clearance rates and, 628-632

glucose disposal rates and, 628 in healthy subjects, 36-44

quantification of insulin secretion and insulin action

obesity and normal glucose tolerance and, 600-604

in non-insulin diabetics with retinopathy insulin resistance and deficiency and, 82-87

and potassium and prevention of thiazide diuretics-induced glucose intolerance, 106–110

study of level of physical training and insulin-stimulated glucose utilization in normal humans, 408–411

EXERCISE

arterial blood flow in insulin-dependent diabetics and, 664-669

effects on triglyceride metabolism in rats with moderate insulin deficiency, 46–50

-induced tachycardia during hypoglycemia

propranolol and metoprolol infusion and, 891

intensive

glucose turnover during recovery from, 734–738

lactate production and removal sites during, 182–183 microalbuminuria in diabetics and, 52*

physical training levels and insulinstimulated glucose utilization in normal humans, 408–411

physical training in streptozotocindiabetic rats

diabetic rats insulin-stimulated glucose uptake and, 165–168

provocation test

evaluation of renal function in diabetics and, 66, 67, 69*, 70– 71*

EXOCYTOSIS

chemostatic model of chloride and, 422-423

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1–100 February, 101–195 March, 197–292 April, 293–386 May, 387–487 June, 489–584 PAGE NUMBERS BY ISSUI Supplement 2, 1–104 July, 585–684 August, 685–780

EVES

diabetic maculopathy clinical trial of photocoagulation with xenon arc and, 1010-1016 lens in diabetic rats effect of sorbinil on metabolite levels

in, 482-485

vitreous

quantitative fluorophotometry in insulin-treated cystic fibrosis patients, 505-514

FACTOR VIIIR:AG

levels in human umbilical vein endothelial cells elevation of glucose concentrations and, 876-878

FASTING

effects on rat pancreatic islets, 235-240 forearm uptake of ingested and intravenous glucose in normal man and, 977-980 in streptozotocin-diabetic rats glucagon and T3 metabolism in. 798-802

FAT CELLS. See Adipocytes

FATTY ACIDS

incorporation into phospholipids of isolated rat pancreatic islets, 6-

long chain saturated B-hydroxy content in hearts of genetically diabetic mice, 782-786 rat aortic rings prostacyclin synthesis and, 217-220

FETUS

canine, of diabetic mother metabolism in, 352-358, 360-367 human

insulin secretion by islets of Langerhans in prolonged organ culture, 915-920

pancreas endocrine cell populations in, 293-300

pancreas, transplantation in diabetic rats normalization of hepatic enzymes after, 730-733

rat islets

transplantation into cerebral ventricles of alloxan-diabetic rats, 852-857 rat pancreas

proinsulin mRNA in, 693-694

degradation by plasmin nonenzymatic glycosylation and reduction of, 680-683

FIBRINOLYSIS

endothelial function in diabetes, and, 17*

FIBROBLASTS

cultured human early detection of degraded A14-125|insulin in, 474-477 insulin binding studies in, 697-704 insulin-resistant diabetic

insulin and insulin-like growth factor 1 receptors in, 541-543

interaction between glucose and dehydroascorbate transport in humans and, 545-548

FLUORESCEIN ANGIOGRAPHY

and quantification of microaneurysms, 8-13*

FLUOROPHOTOMETRY

quantitative vitreous in insulin-treated cystic fibrosis patients, 505-514 vitreous blood-retinal barrier, retinopathy and, 20-27

development of, 23-25* diabetes and, 2*

FOLLICLE-STIMULATING HORMONE

in insulin-treated diabetic and semistarved male rats, 113-115

FRUCTOSE

infusion lactic acidosis caused by, 187

FRUCTOSE-1,6-BISPHOSPHATASE

normalization after fetal pancreas transplantation in streptozotocindiabetic rats, 730-733

GASTRIC INHIBITORY POLYPEPTIDE

abnormalities in spontaneous obesity and diabetes in mice and, 433-434

GASTROINTESTINAL SYSTEM

815-816

disaccharidase activity in streptozotocindiabetic rats, 265-270 short-bowel syndrome lactic acidosis and, 188 small intestine cholesterol influx in hyperphagic streptozotocin-diabetic rats,

sterologenesis in diabetic rats, effects of cholesterol and bile acid on, 368-376

stomach, somatostatin-like immunoreactivity

glucagon and insulin release in rat and, 768-772

uptake of bile acids

in streptozotocin-diabetic rats, 900-906

GENES

human insulin point mutation in, 872-875 hypothesis of recessive mode of heredity in insulin-dependent diabetes and, 169-173

immune response products antibodies to, suppressive effect on development of low-dose streptozotocin diabetes in mice, 869-871

insulin

expression in developing rat pancreas, 691-696 expression in human pancreas, 777-779

GLIBENCLAMIDE

treatment in rats modulation of gap junction and dye coupling between B-cells of pancreatic islets and, 858-868

GLOMERULAR FILTRATION RATE

determinants in insulin-dependent diabetics, 92-95* diabetic nephropathy and, 84* glomerular filtration barrier changes in diabetic nephropathy and, 40-45"

in insulin-dependent diabetics, 52* juvenile diabetes without microangiopathy and, 28-32*

GLOMERULOPATHY, DIABETIC. See also

Nephropathy, diabetic structural characteristics of early and advanced stages, 79-82* structure-function interrelationships in, 81-82*

GLUCAGON

and alterations in T3 metabolism after dietary manipulation and diabetes in rats, 798-802 cells, in infant and fetal human pancreas, 293-300 circulating levels in insulinoma patients,

921-930

gastropancreatic modulations and release in rat, 768-772

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

increased levels of glucose production during hypoinsulinemia and, 633-636

-insulin relationships

hypoglycemia and, 575-582 and insulin release in obese mice oxytetracycline and, 933-937 and ketone body production in diabetics, 387-391

and obese mice, 934-935, 936-937 plasma levels

in insulin-treated non-insulindependent diabetics, 1055-1059 plasma responses in insulin-dependent diabetes

adrenergic contribution to glucose counterregulation and, 887-893

release

cysteamine administration in rats and, 377-378

glucose inhibition of, 561-566 replacement during prolonged somatostatin infusion in man hyperglycemia and β-cell adaptation

and, 943-946

response to hypoglycemia in insulin-dependent diabetics after continuous insulin infusion, 398-401

in long-term streptozotocin-diabetic rats, 55-59

secretin inhibition of

in isolated perfused dog pancreas, 970-973

secretion

anti-insulin antibodies and, glucose counterregulation in insulindependent diabetes and, 134-140

inhibition by glucose infusion in newborn infants, 489-491

in insulin-dependent diabetics, impaired counterregulation of hypoglycemia and, 493-498 ketosis proneness and, 1168-1171

suppressible, in young, ketosisresistant juvenile-onset diabetics, 1168-1171

-stimulated hepatic glucose production prostaglandin synthesis inhibitors and, 439-443

GLUCOCORTICOIDS

effects on spontaneously diabetic rats, 326-329

GLUCOKINASE

January, 1-100

March, 197-292

February, 101-195

liver

normalization after fetal pancreas transplantation in rats, 730-733 from liver and transplantable insulinoma

mannose phosphorylation by, 1146-1150

GLUCOSE

acute stimulation of mouse and rat pancreatic islets biphasic modulation of K+

permeability and, 820-823 and calcium uptake and content of

pancreatic islets of fed and fasted rats and obese/ hyperglycemic mice, 124-129

cell-to-cell communication in rat pancreatic islet monolayer cultures and, 95-98

concentrations in human umbilical vein endothelial cells

Factor VIIIR: Ag levels and, 876-878 counterregulation in insulin-dependent diabetics, 134-140

adrenergic contribution to, 887-893 -dependent insulinotropic polypeptide, see Gastric inhibitory polypeptide

displacement of glycosylated insulins complexed to lectin, 503

fatty acid incorporation into rat islet phospholipids and, 7-8

glucagon and epinephrine-stimulated hepatic production prostaglandin synthesis inhibitors and,

439-443

hepatic in pups of canine diabetic mothers, 362-363

-induced insulin release in diabetic children

immunoglobulin inhibition of, 520-523 -induced insulin release from rat islets.

509-514 effect of retinoids on, 568-573 low-glucose cultured, calcium ions and. 993-999

perifused, pH and, 61-66 infusion in newborn infants

inhibition of glucagon secretion by, 489-491

ingested and intravenous forearm uptake in normal man, 977-980

and insensitivity of insulin release by perfused pancreas of streptozotocin-diabetic rats, 445-451

and insulin biosynthesis, release, and intracellular degradation by rat islets in culture, 254-260

loading

depletion of ascorbic acid in human mononuclear leukocytes in diabetics by, 1078-1080

loading in obese mice oxytetracycline and insulin release and, 932-937

metabolic clearance rate in non-insulindependent diabetics serum glucose level and, 627-632

metabolism, insulin-mediated hyperosmolality and, 1028-1033 oral

response in healthy, non-insulindependent diabetics, 727 splanchnic and peripheral disposal in man and, 675-678

oral and intravenous plasma C-peptide and insulin

response to, 436-438 production during partial hypoinsulinemia

minimal increases in glucagon levels and, 633-636

rat aortic rings prostacyclin synthesis and, 217-220

recovery after hypoglycemia in noninsulin-dependent diabetics, counterregulatory hormone release and, 1055-1059

renal tubular reabsorption in diabetic children, 28-32*

-stimulated insulin biosynthesis in developing rat pancreas, 691-

stimulation of beta-cell DNA replication in intact rat and cultured islets. 1172-1176

stimulation of rat islets chloride and, 416-423

stimulation of somatostatin and insulin release

and inhibition of glucagon release, 561-566

transport

interaction between dehydroascorbate transport and, in human neutrophils and fibroblasts, 545-548

turnover

fetal and neonatal in pups of canine diabetic mothers, 352-358 during recovery from intensive exercise, 734-738

uptake

diet and aging in rats and, 175-179 uptake and production in normals hyperinsulinemia and hyperglycemia

and, 36-44 utilization

insulin-stimulated in normal humans, physical training levels and, 408-411

GLUCOSE CLAMP TECHNIQUE. See Euglycemic glucose clamp technique

GLUCOSE INTOLERANCE

this zide diuretics-induced maintenance of body potassium and, 106-110

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

April, 293-386 May, 387-487 June, 489-584 Supplement 2, 1-104 July, 585-684 August, 685-780

GLUCOSE METABOLISM

in adipose tissue of obese and lean mice ciglitazone and, 839-845 body composition and, 967-968 B-hydroxybutyrate infusion in man and, 197-205

GLUCOSE TOLERANCE

impaired in rats effect of overfeeding on weight gain and adipose tissue cellularity. 1023-1026

metformin therapy in non-insulindependent diabetics and, 1172-1176

normal

in moderately obese individuals, insulin secretion and action in, 600-604

reduced in non-insulin-dependent diabetics insulin binding and responsiveness in fat cells from, 748-753

GLUCOSE TOLERANCE TESTS

intravenous, in streptozotocin-diabetic rats, 277-278

oral

criteria for diabetes diagnosis and, 343-351

reflux of islet-containing pancreatic fragments into splenic veins of dogs and, 454

GLUCOSE-6-PHOSPHATASE

normalization after fetal pancreas transplantation in streptozotocindiabetic rats, 730-733

GLUCOSE-6-PHOSPHATE-DEHYDROGENASE

normalization after fetal pancreas transplantation in diabetic rats, 730-733

GLUCOSYLATION

collagen, antigenicity and, 1182-1189 human and rat albumin, binding to renal basement membranes of diabetic rats, 380-382

GLUTATHIONE

lens level in diabetic rats effect of aldose reductase inhibitor on, 482-485

GLYCERALDEHYDE

effects on rat islets chloride and, 418-420 and insulin release from perfused streptozotocin-diabetic perfused rat pancreas, 448

GLYCEROL 3-PHOSPHATE

lens level in diabetic rats effect of aldose reductase inhibitor on. 482-485

GLYCOGEN

hepatic stores in pups of canine diabetic mothers, 361-362, 364-366 synthesis from lactate. 183

GLYCOGEN SYNTHASE

streptozotocin-diabetic rat liver and impaired glycogenic substrate activation associated with depressed synthase phosphatase, 1134-1139

GLYCOLYSIS

in pups of canine diabetic mothers, 366

GLYCOSYLATED HEMOGLOBIN

in cystic fibrosis patients, 506-507 levels and alteration of blood-retinal barrier. 25*, 26* platelet monoamine oxidase activity in diabetics and, 130-132

GLYCOSYLATION. See Nonenzymatic glycosylation

GLYCOSYLTRANSFERASES

hepatic, in streptozotocin-diabetic rats. 412-415

GOLDTHIOGLUCOSE

-obese mice

insulin and insulin-like growth factor I effects on protein synthesis in muscles from, 392-396

GRAVES' disease

T-lymphocyte abnormalities in, 93

GROWTH FACTOR 1 RECEPTORS

parallel decreases in expression of insulin receptors in mutant fibroblasts, 541-543

GROWTH HORMONE

circulating levels in insulinoma patients, 921-930 deficiency in streptozotocin-diabetic rats

serum and liver somatomedin inhibitors, 262-64

hypersecretion

pancreatic islet hormones and, 67-73 plasma levels in insulin-treated noninsulin-dependent diabetics, 1055-1059

serum levels in insulin-treated diabetic and semi-starved male rats, 113-115

stimulation of islet B-cell replication in neonatal rat pancreatic cultures, 307-311

HEART

aortas of streptozotocin-diabetic rats effects of insulin or tolbutamide treatment on arachidonic acid metabolism of, 847-850

failure

lactic acidosis and, 188 mitochondria from genetically diabetic

defective oxidative metabolism of, 781-786

myocardial adrenergic and cholinergic receptors

from streptozotocin-diabetic rats, 881-885

myocardial β-receptor adenylate cyclase system from streptozotocindiabetic rats

isoproterenol and, 1110-1115 of normal and diabetic ketotic rats

regulation of triacylglycerol lipolysis in, 718-722

abnormalities in diabetics, 101-104

HEMOLYTIC PLAQUE ASSAY

in streptozotocin-diabetic mice, 157

HEPARAN SULFATE

reduced sulfation in diabetic rats, 337-341

HEPATITIS

paracetamol-induced lactic acidosis and, 188

HEPATOCYTES

of genetically obese rats insulin binding to, 605-608 from normal and streptozotocin-diabetic tolazamide potentitation of insulin action in. 206-211

HEREDITY

diabetic nephropathy and, 54-55* and genetically diabetic mice defective oxidative metabolism of heart mitochondria from, 781-

HLA study of insulin-dependent diabetes rejection of recessive hypotheses and, 169-173

insulin gene expression in human pancreas, 777-779

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1-100 April, 293-386 February, 101-195 May, 387-487 March, 197-292 June, 489-584

Supplement 2, 1-104 July, 585-684 August, 685-780

muscle capillary basement membrane width studies in identical twins discordant for insulin-dependent diabetes, 557-560

mutation in human insulin gene abnormal insulin and, 872-875

and parallel decreases in expression of receptors for insulin and insulinlike growth factor, 141-143

recessive hypothesis for susceptibility to insulin-dependent diabetes, 774-776

and suppressive effect in mice of antibodies to immune response gene products, 869-871

and virus-induced diabetes in autoimmune New Zealand mice, 755-758

HERPES SIMPLEX VIRUS INFECTION

in nonobese diabetic mice, 248, 250, 252

HLA ANTIGENS

genotypic study of insulin-dependent diabetes recessive hypothesis and. 169-173

HOPI INDIANS

diabetic

prevalence of microvascular complications in, 894-898

HORMONES

counterregulatory, release after hypoglycemia in non-insulindependent diabetics glucose recovery after, 1055-1059

insulin-glucagon relationships and hypoglycemia therapy, 575-582 pancreatic islet

effect of mammosomatotropic tumors on, 67-73

role in nocturnal insulin requirements of insulin-dependent diabetics, 403-407

β-HYDROXYBUTYRATE

effects on mouse embryogenesis, 610proteolysis in man and, 197-205

18-HYDROXYCORTICOSTERONE

plasma

responsiveness to angiotensin II or corticotropin in nonazotemic diabetics, 1-4

HYPERCHOLESTEROLEMIA

retinopathy and nephropathy and, 99*

January, 1-100

March, 197-292

exercise in insulin-dependent diabetics and, 664-669

insulin-related, near injection sites in brittle and stable diabetics, 466-473

HYPERGLUCAGONEMIA

hypophysectomy in alloxanized dogs and. 26-32

HYPERGLYCEMIA

control

in obese non-insulin-dependent diabetics, carbohydrate oxidation and storage and, 982-987

in cystic fibrosis patients, insulin therapy for

quantitative vitreous fluorophotometry and, 505-514

effects on peripheral and splanchnic glucose uptake and hepatic glucose production, 36-44

glomerular pressure and hemodynamics and, 32*

glucagon-induced in partial hypoinsulinemia, 633-636

increased collagen glucosylation during, 1182-1189

-induced intracellular ascorbic acid depletion in human mononuclear leukocytes, 1078-1081 in insulin withdrawal studies in

streptozotocin-diabetic pregnant rats

skeletal malformations in offspring of, 1141-1145 nerve function in teenage diabetics and,

142-146 somatostatin infusion with glucagon replacement in man and, 943-

946 **HYPERINSULINEMIA**

aging and, 18 insulin-induced, T-lymphocytes and, 712-717

in obese diabetic mice gastric inhibitory polypeptide abnormalities and, 433-434

peripheral glucose uptake, hepatic glucose production and splanchnic glucose uptake and, 36 - 44

in pups of canine diabetic mothers, 352-358

HYPEROSMOLALITY

impairment of insulin-mediated glucose metabolism in man and, 1028-1033

HYPERPHAGIA

in streptozotocin-diabetic rats cholesterol dynamics and, 811-818

HYPERTENSION

in diabetic nephropathy antihypertensive treatment and, 83-

incipient diabetic renal disease and, 1°

HYPOGLYCEMIA

glucagon response to

in insulin-dependent diabetics after continuous insulin infusion. 398-401

impaired counterregulation of in insulin-dependent diabetics, 493-498

insulin-glucagon relationships and, 575-582

insulin-induced in rats

peripheral neuropathy and, 383-386 and lack of glucagon response in longterm streptozotocin-diabetic rats, 55-59

in non-insulin-dependent diabetics counterregulatory hormone release and glucose recovery after, 1055-1059

plasma glucose recovery from, in insulin-dependent diabetics adrenergic contribution to, 887-893

polyethylene glycol insulin in animals and, 955

pulsatile vs. continuous delivery of insulin and, 617-620

HYPOGLYCEMIC AGENTS

ciglitazone

effect on glucose and lipid metabolisms and insulin binding in adipose tissue of mice, 839-845 studies in diabetic animals, 830-837

HYPOINSULINEMIA

glucose levels and glucose production during, 633-636 hypophysectomy in alloxanized dogs and, 26-32

HYPOKALEMIA

thiazide effect on glucose tolerance and, 106-110

HYPOPHYSECTOMY

in alloxan-diabetic dogs glucoregulatory mechanisms and, 26-

HYPOTHALAMUS

insulin binding by, in monkeys and pigs, 284-291

HYPOTHYROIDISM

streptozotocin-induced

myocardial adrenergic and cholinergic receptors and, 881-885

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

April, 293-386 February, 101-195 May, 387-487 June, 489-584 Supplement 2, 1-104 July, 585-684 August, 685-780

IMMUNE RESPONSE

to insulin

and insulin species of origin, purification levels, and formulation, 595

T-cell

in streptozotocin-diabetic mice, 156-163

IMMUNOFLUORESCENCE STUDIES

of diabetic rat kidney injected with glucosylated human or rat albumin, 381–382 of insulinomas, 924–925, 929–930 quantitative, of endocrine cell

quantitative, of endocrine cell populations in fetal human pancreas, 293–300

IMMUNOGLOBULIN

FTS inhibitory

in genetically diabetic mouse sera, 1048–1053

from insulin-dependent diabetic children inhibition of glucose-induced insulin release by, 520–523

IMMUNOGLOBULIN E

anti-insulin

assays in diabetics treated with human insulin of recombinant DNA origin, 517–519

IMMUNOGLOBULIN G

glomerular filtration in insulin-dependent diabetics, 92–95* localization in diabetic nephropathy, 52* urinary loss, diabetic nephropathy and

proteinuria mechanisms and, 40-45°

IMMUNOHISTOCHEMISTRY

in basement membrane-related antigens and diabetic nephropathy study, 36–39*

IMMUNOLOGY. See also

Immunosuppression amyloidosis and insulin infusion in dogs, 1092–1100

antigenicity of glucosylated collagen, 1182-1189

anti-islet immunity and thymic dysfunction in genetically diabetic mice, 1048–1053

cellular immunity abnormalities in nonobese diabetic mice, 247– 253

effects of glucocorticoids, cyclosporin-A and antilymphocyte serum on spontaneously diabetic rats, 326–329

impairment of T-cell regulation of humoral immune response in diabetic mice, 156–163 insulin immunogenicity studies, 592-598 quantitation of islet cell surface

antibodies in insulin-dependent diabetics and normals, 460-464

suppressive effect of antibodies to immune response gene products on development of streptozotocin diabetes in mice, 869–871

virus-induced diabetes in autoimmune New Zealand mice, 755–758

IMMUNOPEROXIDASE STAINING

of pancreatic endocrine fractions from infants with erythroblastosis fetalis, 313–315

IMMUNOREACTIVITY

of human insulin of recombinant DNA origin, 516-519

IMMUNOSUPPRESSION

effect on streptozotocin-diabetic mice, 148–154

IMPOTENCE

diabetes and

vasoactive intestinal polypeptide-like immunoreactive nerves in penis and, 1075–1077

INCRETIN

difference between plasma C-peptide and insulin response to oral and intravenous glucose and, 436– 438

INDIA

suppressible glucagon secretion in young, ketosis-resistant juvenileonset diabetics in, 1168–1171

INDOMETHACIN

carbohydrate homeostasis and insulin secretion and, 231–233

INFANTS

endocrine cell populations in pancreas of, 293-300

with erythroblastosis fetalis

pancreatic endocrine cell fractions in, 313–315

newborn

inhibition of glucagon secretion by glucose infusion in, 489-491

of spontaneously diabetic Chinese hamsters teratogenesis in, 637–642

INSULIN

action in hepatocytes from normal and diabetic rats

tolazamide potentiation of, 206-211

aggregation

insulin infusion systems and, 424-431 analogues

and degradation of insulin receptors in rat adipocytes, 1001–1008 antilypolytic action of

omental and subcutaneous fat and, 117–123

and ¹⁴C-arachidonic acid conversion to prostacyclin and/or thromboxane

in diabetic rat tissues, 846-850 binding

in adipose tissue of obese and lean

mice ciglitazone and, 839-845

cigiliazone and, 839–845 and differences between insulin receptors of red blood cells and monocytes, 1017–1021

by insulin receptors in isolated rat adipocytes, 319–324

intracellular distribution, and action in mouse isolated pancreas acini, chloroquine and, 1102–1108

measurement by erythrocyte ghosts, 644–647

in monkey and pig hypothalamus, 284–291

binding and removal

by livers of genetically obese rats, 605-608

binding and responsiveness in fat cells from non-insulin-dependent diabetics with reduced glucose tolerance, 748–753

biosynthesis, release, and intracellular degradation

in rat islets in culture, glucose and, 254–260

Chicago

as product of point mutation in human insulin gene, 872–875

circulating levels in insulinoma patients, 921–930

clearance

and nocturnal insulin requirements in insulin-dependent diabetics, 403–407

continuous subcutaneous infusion in diabetics

amyloidosis and, 88-90

and very-low-density lipoprotein triglyceride metabolism, 75–80

deficiency in streptozotocin-diabetic rats exercise, sucrose and insulinstimulated glucose uptake in, 165–168

-dependent diabetes

abnormal glucose counterregulation in, 134–140

adrenergic contribution to ghicose counterregulation in, 887–893 determinants of glomerular filtration in,

92-95*

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1–100 February, 101–195 March, 197–292 April, 293–386 May, 387–487 June, 489–584 Supplement 2, 1–104 July, 585–684 August, 685–780

effects of metabolic control on plasma lipids in, 20-24 fibrinolytic activity in, 4-6* glomerulopathy in, 79-82* HLA study and recessive hypothesis of, 169-173 in identical twins discordant for muscle capillary basement membrane width, 557-560 impaired counterregulation of hypoglycemia, in, 493-498 kidney basement membrane antigens in, 34-39* low somatomedin-C levels in, 1060-1068 mononuclear leukocyte β2-adrenergic receptors and adenylate cyclase in, 825-828 platelet enzyme activities in, 47-50* polymorphonuclear leukocyte thromboxane and B2 and prostaglandin E production in, 622-625 quantitation of islet cell surface antibodies with 125-I protein A in, 460-464 recessive hypothesis for susceptibility to. 774-776 resting and exercise blood flow in, 664-669

-dependent diabetic children immunoglobulin-induced inhibition of glucose-induced insulin release in. 520-523 -dependent juvenile diabetes

comprement-fixing cytoplasmic islet cell antibodies and insulin secretion in, 743-46 renal tubular reabsorption and GFR in. 28_32

effects of streptozotocin diabetes on adrenergic and cholinergic receptors in rat myocardium and, 881-885

endogenous, tissue sensitivity to thiazides and potassium loss and, 108 fatty acid incorporation into rat islet

phospholipids and, 6-12 -glucagon relationships hypoglycemia and, 575-582

glucose-induced release from lowglucose cultured islets calcium ions and, 993-999 glucose-stimulated release

dissociation from glucose inhibition of glucagon release in perfused rat pancreas, 561-566

glycosylated, complexed to Concanavalin A closed-loop insulin delivery systems and. 499-504

high-potency, non-aggregating sulfation procedure for preparation of, 1087-1091

immunoreactive in cultured rat islets, glucose and, 254-260 from developing rat pancreas, 692

712-717

neurotensis in pancreas of genetically diabetic obese mice and, 51-53 -induced hyperinsulinemia T-lymphocyte insulin receptors and,

-induced hypoglycemia in non-insulin-dependent diabetics counterregulatory hormone release and, 1055-1059 in rats, peripheral neuropathy and,

383-386 infusion, pulsatile vs. continuous delivery

hypoglycemic effects of, 617-620 intestinal uptake of bile acids and, 905 intranasal administration as insulin-bile salt aerosol

in normal and diabetic subjects, 1040-1047

adipose tissue studies in humans and, 117-123

metabolic effects on human adipose tissue

aging and, 959-964 moderate deficiency in rats effects of exercise and diet on triglyceride metabolism in, 46-

modulation of pancreatic CCK receptors and enzyme secretion in isolated acini of streptozotocin-diabetic rats. 241-245

monoiodoinsulin isomers binding studies in hepatic and extrahepatic tissues, 697-704

purified binding studies of, 705-710 monomeric ferritin-occupied receptor sites on liver and adipocyte plasma membranes

anti-insulin antibodies at, 648-653 nocturnal requirements in insulindependent diabetes

role of pituitary adrenocortical axis, counterregulatory hormones and insulin clearance in, 403-407

pharmacokinetics after continuous subcutaneous infusion or bolus injection in diabetics, 331-336 plasma

response to oral and intravenous glucose, compared with Cpeptide response, 436-438 polyethylene glycol

lipid tissues in animals and, 953-957 protein synthesis in muscles from lean and obese mice and, 392-396

purified pork and beef immunogenicity studies, 592-598 rat aortic rings prostacyclin synthesis in vitro and, 217-220 of recombinant DNA origin

immunoreactivity of, 516-519 release

from biodegradable matrix implanted in diabetic rats, 478-480 cysteamine administration in rats and, 377-378

feedback inhibition studies, 1162-1167 glucose-stimulated in obese diabetic mice, gastric inhibitory polypeptide abnormalities and, 433-434

by perifused rat pancreatic islets, pH and, 61-66

from perfused pancreas from streptozotocin-diabetic rats, glucose insensitivity and amino acid hypersensitivity of, 445-451

from rat islet cells, effects of retinoids on. 568-573 in rats, reciprocal gastropancreatic

modulations for, 768-772 requirements of insulin-resistant diabetics

biostator and prediction of, 908-913

ciglitazone and, 830-837 and deficiency in diabetic retinopathy,

82-87 resistance in obese and/or diabetic animals.

reduction by ADD-3878,U-63, 287 reversibility in insulin-dependent

diabetes, 908-913 response to glucose infusion in newborn infants, 489-491

secretion effects of fasting on pancreatic islets in rats and, 235-240

by fetal human islets of Langerhans in prolonged organ culture, 915-920

glucose-induced, in rat pancreatic islet, 509-514

inhibition by anti-calmodulin drug, 1126-1132

in insulin-dependent juvenile diabetics, relationship to complement-fixing cytoplasmic islet cell antibodies, 743-746

in isolated rat islets of Langerhans, dynorphin and, 685-689

metformin therapy in non-insulindependent diabetics and, 1172-1174

in obese mice, oxytetracycline and, 932-937

prostaglandin E and, 231-233 by rat islet, mitochondrial adenine nucleotide translocase and regulation of, 793-797

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

secretion and action

in rats, effects of aging and diet on, 175-179

in nonobese and moderately obese individuals with normal glucose tolerance, 600–604

sensitivity

body composition in humans and, 965–968

short-acting soluble mixed with longeracting

reduced solubility of, 1177–1180 -stimulated glucose utilization in normal humans

physical training level and, 408–411 subcutaneous injection sites in stable and brittle diabetics

changes in blood flow near, 466–473 sulfated

intravenous infusions in pancreatectomized dogs, plasma glucose levels and, 788– 791

therapy alteration of blood-retinal barrier and, 26*

diabetic nephropathy and, 65–66* diabetic pregnancy and early embryogenesis and, 1070–1073 and islet transplantation in

streptozotocin-diabetic rats, autonomic neuropathy and, 532– 540

platelet function and, 16–17° red cells and platelets and, 88–91° in non-insulin-dependent diabetics, plasma triglyceride, cholesterol, and lipoprotein lipase levels and, 525–529

-treated cystic fibrosis patients quantitative vitreous fluorophotometry in, 505–514

-treated diabetic and semi-starved male rats

Sertoli cell function in, 112–115 treatment in streptozotocin-diabetic mice, immune response in, 157–

and vitamin D metabolite production by renal slices from streptozotocindiabetic rats and, 302–305

withdrawal in early gestation skeletal malformations in offspring of streptozotocin-diabetic rats and, 1141–1145

withdrawal in ketotic diabetes, 387-391

INSULIN CLAMP TECHNIQUE. See Euglycemic glucose clamp technique

INSULIN GENE

January, 1-100

March, 197-292

February, 101-195

expression in developing rat pancreas, 691–696

expression in human pancreas, 777–779 human, point mutation in, 872–875

INSULIN INFUSION SYSTEMS

biostator and prediction of insulin requirements in insulin-resistant diabetics, 908–913

hypoglycemia and insulin-glucagon relationships and, 581–582

implantable

glycosylated insulin complexed to Concanavalin A as biochemical basis for, 499–504

insulin infusion in dogs and amyloidosis and, 1092–1100 and insulin therapy in non-insulindependent diabetics

hypoglycemia and, 1055-1059 long-term therapy with

glucagon response to hypoglycemia after, 398–401 nocturnal insulin requirements in insulin-

dependent diabetes and role of pituitary-adrenocortical axis and counterregulatory hormones in, 403–407

physical stability of insulin and, 424-431

INSULIN-LIKE GROWTH FACTOR I

protein synthesis in muscles from lean and obese mice and, 392–396

INSULIN RECEPTORS

in rat adipocytes structural studies of, 760–766 binding in human adipose tissue aging and, 959–964

binding studies with monoiodoinsulin isomers, 705–710

binding to monocytes

and metformin therapy in non-insulindependent diabetics, 1172–1174

biosynthesis and membrane insertion kinetics of, 319–324 insulin-like growth factor 1 receptors and

parallel decreases in expression in fibroblasts, 541–543

in liver and adipocyte plasma membranes

anti-insulin antibody aggregation of occupied sites of, 648–653

monocyte and red blood cell pyruvate kinase activity of, 1017–1021 rat adipocytes, degradation of, 1001–

1008 specificities in hepatic and extrahepatic tissues, 697–704

T-lymphocyte, in vitro control of in vivo modulation of insulin and, 712– 717

1251-INSULIN

binding by monkey and pig hypothalamus, 284–291 in human fibroblasts detection by high-performance-liquid chromatography, 474–477

INSULINOMAS

cloned rat cell line

calmodulin-binding proteins in, 1126– 1132 human functional and morphological characterization of, 921–930 transplantable mannose phosphorylation by glucokinase from, 1146–1150

INSULITIS

streptozotocin-induced in mice immunosuppression and, 148–154

IRRADIATION

immunosuppression effect on thymectomized streptozotocin-diabetic mice, 148–154

ISLETS OF LANGERHANS

fetal human, in prolonged organ culture insulin secretion by, 915–920 of genetically diabetic mice anti-islet immunity and, 1048–1053 isolated rat effect of dynorphin on insulin and

effect of dynorphin on insulin and somatostatin secretion, calcium uptake, and c-AMP levels in, 685–689

rat, glibenclamide- and/or diazoxidetreated

and in vivo modulation of gap junction and dye coupling between Bcells, 858–868

3-ISOBUTYL-1-METHYLXANTHINE

cell-to-cell communication in rat pancreatic islet monolayer cultures and, 95–98

glucose stimulation of beta-cell DNA replication in intact rat and rat islets and, 1172–1176

ISOPROTERENOL

adenylate cyclase sensitivity to in insulin-dependent diabetes, 825– 828

sensitivity of myocardium to in streptozotocin-diabetic rat heart, 1110–1115

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

April, 293–386 May, 387–487 June, 489–584 Supplement 2, 1–104 July, 585–684 August, 685–780

JAPAN

diabetes diagnosis criteria study in. 343-351

JUVENILE DIABETES

insulin-dependent

inhibition of glucose-induced insulin release by immunoglobulin from, 520-523

relationship between complementfixing cytoplasmic antibodies and insulin secretion in, 743-46 metabolic control and nerve function in, 142-146

protection against basement membrane thickening in, 2*

renal tubular reabsorption and glomerular filtration rates in, 28-

α-KETOGLUTARATE

hepatic

in pups of canine diabetic mothers,

α-KETOISOCAPROATE

and glucose stimulation of DNA replication in rats and rat islets, 1172-1176

insulin release from streptozotocindiabetic perfused rat pancreas and, 449

KETONE BODIES

glucagon and production of in diabetics, 387-391 and β-hydroxybutyrate effects on early mouse embryogenesis, 610-615 infusion in man proteolysis and, 197-205 rat aortic ring prostacyclin synthesis in

vitro and, 217-220

KETOSIS

glucagon and ketone body production in, 387-391 -resistant juvenile-onset diabetics suppressible glucagon secretion in, 1168-1171

in streptozotocin-diabetic rats regulation of triacylglycerol lipolysis in perfused hearts from, 718-722

KIDNEYS

basement membranes of diabetic and control rats albumin binding studies in, 380-382

Bowman's capsule thickening in insulindependent diabetes, 38°

diabetic nephropathy

proteinuria mechanisms in, 40-45* diabetic renal disease

hypertension and, 1* disease

stages in diabetics, 64-77*

enlargement

diabetes and, 52*

function

antihypertensives in nephropathy and, 86-87*

in diabetic nephropathy, 83-84* glomerular basement membrane, polyantigenic expansion

constituents in diabetic nephropathy, 34-391

glomerular filtration barrier studies diabetic nephropathy and, 40-45° glomerular filtration of proteins

in insulin-dependent diabetics, 92-95* glomerular hyperfiltration in early diabetes 2*

glomerular mesangium, accumulation of intercellular substances in

diabetes and, 1-2* glomerulopathy in diabetics, 79-82* remnant kidney model, 53*

renal slices from streptozotocin-diabetic rats, vitamin D metabolite production by

insulin and, 302-305 transplantation in diabetics

glomerular basement membrane and mesangium after, 948-952 tubular basement membrane thickening.

tubular reabsorption and glomerular

filtration rates juvenile diabetes and, 28-32*

LACTASE. See Disaccharidases

LACTATE

ingested and intravenous forearm uptake in normals, 977-980 effects of high concentrations of, 188-

production and removal sites, 181-183

transport across cell membranes, 184-185

turnover

effect of acid-base changes on, 183-184

LACTIC ACIDOSIS

effect of acid-base changes on lactate turnover and, 183-184

lactate production and removal sites and, 181-183

lactate transport across cell membranes and, 184-185

pathogenesis, 185-188 biguanides and, 187-138 fructose infusions and, 187

shock and, 189

treatment, 189

LESIONS

of diabetic nephropathy, 34, 52-53* glomerular basement membrane and mesangium

after kidney transplantation in diabetics, 948-952

mesenteric nerve in streptozotocindiabetic rats

islet transplantation and insulin therapy and, 535-536 microaneurysms

quantitation with fluorescein angiography, 8-13*

LEUCINE

insulin release from streptozotocindiabetic perfused rat pancreas and, 449

LEUCINE CARBON

metabolism in man

β-hydroxybutyrate infusion and, 197-205

H-LEUCINE

insulin labeling by

in study of glucose effects on insulin handling by cultured rat islets, 254-260

LEUKOCYTES

human mononuclear

hyperglycemia-induced intracellular depletion of ascorbic acid in, 1078-1080

mononuclear

B2-adrenergic receptors and adenylate cyclase sensitivity in insulin-dependent diabetics and, 825-828

LIPIDS

plasma levels

metabolic control in insulin-dependent diabetics and, 20-24

erythrocyte membrane, in diabetics, 587
metabolism in adipose tissue of obese
and lean mice
ciglitazone and, 839–845
oxidation in obese non-insulindependent diabetics

LIPOGENESIS

by hepatocytes from normal and streptozotocin-diabetic rats tolazamide and, 206–211

glycemic control and, 985

LIPOLYSIS

insulin-induced adipose tissue studies in humans and, 117–123 triacylglycerol regulation in perfused hearts of

regulation in perfused hearts of normal and ketotic diabetic rats, 718–722

LIPOPROTEIN LIPASE

intracellular activity in perfused hearts of normal and streptozotocindiabetic ketotic rats, 718–722 plasma levels in non-insulin-dependent diabetics response to therapy, 525–529

LIPOPROTEIN TRIGLYCERIDE

very-low-density effect of continuous insulin infusion in diabetics on, 75–80 metabolism in non-insulin-dependent diabetics, 271–276

LIPOPROTEINS

plasma levels metabolic control in insulin-dependent diabetics and, 20–24

LIVER

amyloid deposits in dogs after insulin infusion, 1092–1100 enzymes normalization after fetal pancreas

normalization after fetal pancreas transplantation in diabetic rats, 730–733 of genetically obese rats

insulin binding and removal by, 605–608
glucagon and epinephrine stimulated

glucose productior.

prostaglandin synthesis inhibitors and,
439–443

glucokinase mannose phosphorylation by, 1146– 1150

glucose output in insulin-dependent diabetics, 493– 498 glycosyltransferases

in streptozotocin-diabetic rats, 412-415

heparan sulfate sulfation in streptozotocin-diabetic rats, 337– 341

insulin binding studies in, 697–704 intermediary metabolism in pups of canine diabetic mothers, 360–367

lactate removal by, 181–183 normal and diabetic rat hepatocyte cultures

tolazamide and insulin action by, 206-211

plasma membranes

anti-insulin antibody aggregation of insulin-occupied receptor sites on, 648–653

role in lactic acidosis, 186–187 of streptozotocin-diabetic rats impaired activation of glycogen synthase and depressed synthase phosphatase activity,

1134–1139 somatogenic and lactogenic binding sites in streptozotocin-diabetic

rats plasma somatomedin-C and changes in, 1060–1068

somatomedin inhibitors in growth hormone-deficient diabetic rats, 262–264

splanchnic glucose disposal in man, 675–678

transplantation of fetal rat islets into compared with transplantation into cerebral ventricles, 852–857 triglyceride secretion

reduction of insulin resistance by new antidiabetic agent and, 805, 808–810

LUNGS

isolated perfused from streptozotocindiabetic rats arachidonic acid metabolism and insulin or tolbutamide treatment of, 847–850

LUTEINIZING HORMONE

in insulin-treated diabetic and semistarved male rats, 113-115

LYMPHOCYTES

immunosuppression in streptozotocindiabetic mice and, 148–154

IM-9
insulin binding studies in, 697–704
of streptozotocin-diabetic rats,
adrenergic β-receptor adenylate

cyclase system isoproterenol and, 1110–1115

transformation in diabetics treated with insulin of recombinant DNA origin, 516-519

M

MACULOPATHY, DIABETIC

and photocoagulation with xenon arc, 1010-1016

MALATE

hepatic

in pups of canine diabetic mothers, 363

MALONDIALDEHYDE

platelet production in diabetics, 48-49*

MALTASE. See Disaccharidases

MANNITOL

-insulin-mediated metabolism hyperosmolality and, 1028–1033

MANNOSE

insulin release from streptozotocindiabetic perfused rat pancreas,

phosphorylation by glucokinase from liver and transplantable insulinoma, 1146–1150

METABOLIC CLEARANCE RATES

glucose, in non-insulin-dependent diabetics relationship between serum glucose level and, 627–632

METABOLISM

abnormalities in uncontrolled diabetes rat aortic ring prostacyclin synthesis and, 217–220

adipose tissue glucose and lipid in obese and lean mice ciglitazone and, 839–845

ciglitazone and, 839-845 arachidonic acid

diabetes and, 622-625

carbohydrate and lipid oxidation rates in obese non-insulin-dependent diabetics

glycemic control and, 982–987 carbohydrate homeostasis and insulin secretion

prostaglandin E and, 231–233 cholesterol

hyperphagia in streptozotocin-diabetic rats and, 811–818

endothelial cell glucose concentrations and, 876–878 fetal and neonatal in pups of canine

all and neonatal in pups of canine diabetic mothers, 352–358, 360–367

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE April, 293–386 Supplement 2, 1–104

January, 1–100 April, 293–386 February, 101–195 May, 387–487 March, 197–292 June, 489–584 PAGE NUMBERS BY ISSUE Supplement 2, 1–104 July, 585–684 August, 685–780

glucose

body composition and, 967-968 hyperosmolality and, 1028-1033

glucose turnover during recovery from intensive exercise, 734-738

hepatic intermediary

in pups of canine diabetic mothers, 360-367

human adipose tissue

insulin and aging and, 959-964

β-hydroxybutyrate infusion in man proteolysis and, 197-205

125 I-insulin

detection in human fibroblasts, 474-477

oxidation

defective in heart mitochondria from genetically diabetic mice, 781-786

platelet arachidonic acid in diabetics, 16°, 17°

polyol pathway activity and tissue myoinositol

diabetic neuropathy pathogenesis and, 988-991

protein, in muscles from lean and obese mice

insulin and insulin-like growth factor I and, 392-396

T3 in fasted and fed streptozotocindiabetic rats

glucagon and, 798-802 triglyceride, in rats with moderate insulin deficiency

effect of exercise and diet on, 46-50 very-low-density lipoprotein triglyceride continuous insulin infusion in diabetics and. 75-80

in non-insulin-dependent diabetes, 271-276

METFORMIN

lactic acidosis onset and, 187-188

METOPROLOL

glucose counterregulation in insulindependent diabetes and adrenergic receptors and, 887-893

MICE

antibodies in basement-membrane related antigens

in diabetic nepropathy study, 34-39* autoimmune New Zealand virus-induced diabetes in, 755-758

embryogenesis role of maternal diabetes in, 610-615 role of maternal diabetes and insulin

therapy in, 1070-1073 genetically diabetic

anti-islet immunity and thymic dysfunction in, 1048-1053 defective oxidative metabolism of heart mitochondria from, 781-786

peripheral nerve abnormalities in, 1152-1160

genetically obese and diabetic immunoreactive neurotensin in pancreas of, 51-53

intratesticular transplants of islet xenografts from rats, 213-216

islets

biphasic modulation of K+ permeability during acute stimulation with glucose, 820-823

isolated pancreatic acini

chloroquine effect on insulin binding, distribution and action in, 9, 1-6

lean and goldthioglucose-obese insulin and insulin-like growth factor I effects of protein synthesis in muscle from, 392-396

nonobese diabetic

cellular immunity abnormalities in, 247-253

effect of oxytetracycline on insulin release in, 932-937

obese and/or diabetic

ciglitazone studies in, 830-837 obese hyperglycemic

effect of glucose on calcium uptake and content of pancreatic islets, 124-129

obese and lean

effects of ciglitazone on adipose tissue glucose and lipid metabolism and insulin binding in, 839-845

reduction of insulin resistance by new antidiabetic agent in, 804-810 spontaneous syndromes of obesity and

diabetes in gastric inhibitory polypeptide abnormalities and, 433-434

streptozotocin-diabetic

effect of immunosuppression on, 148-154

suppressive effect of antibodies to immune response gene products on development of streptozotocin diabetes in, 869-871

MICROALBUMINURIA

diabetic nephropathy stage and, 72* exercise in diabetics and, 52*

MICROANGIOPATHY

blood flow abnormalities in diabetics and, 61-62*

fluorescein angiograms and quantitation of microaneurysms in, 8-13* mechanisms involved in, 2-3°

pathogenesis, 1*

platelet and endothelial function and. 14-18*

platelet enzyme activities and, 47-50* renal tubular reabsorption and GFR in juvenile diabetics and, 28-32*

MICROSCOPY

cell-to-cell communication in rat pancreatic islet monolayer cultures and, 97

electron

of insulinomas, 925, 926-930 of glomeruli from long-term diabetics, 79-82*

light

of cultured fetal islets of Langerhans, 918, 919

light and electron

of kidneys transplanted into diabetics, 949, 950

of peripheral nerve abnormalities in genetically diabetic mice, 1152-1160

of liver, kidney, spleen and pancreas from dogs with amyloidosis, 1092-1100

of mesenteric nerves of streptozotocindiabetic rats after islet cell transplantation and insulin therapy, 536-538

of mouse embryos

β-hydroxybutyrate effects on, 610-615

of pancreatic islets of immunosuppressed streptozotocin-diabetic mice, 152 of rat islet cells

effects of retinoids on, 571-572 glibenclamide and/or diazoxide treatment and, 861-862, 867

of spleens of dogs after reflux of isletcontaining pancreatic fragments into, 456-457

of transplanted fetal islets in rat cerebral ventricles, 855, 856

MICROVASCULAR DISEASE

platelet and endothelial function and, 14-18*

MITOCHONDRIA

of heart of genetically diabetic mice defective oxidative metabolism of, 781-786

rat islet

adenine nucleotide translocase and regulation of insulin secretion and, 793-797

MONKEY

hypothalamus insulin binding by, 284-291

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

MONOAMINE OXIDASE ACTIVITY

platelet

in insulin-dependent and non-insulindependent diabetics and nondiabetics, 130-132

MONOCYTES

insulin receptor binding to metformin therapy in non-insulindependent diabetes and, 1172-1176

MORPHINE

insulin secretion and, 685

MORTALITY

hypoglycemia in insulin-treated non-insulindependent diabetics, 1055 subcutaneous insulin infusion and. 581-582

MUSCLE

action potentials peripheral neuropathy in rats and, 383-386 capillary basement membrane width in twins, 549-555, 557-560 from lean and obese mice

insulin and insulin-like growth factor I and protein synthesis in, 392-396

mass

effects of body composition on insulin sensitivity and, 965-968 skeletal in alloxan-diabetic rats, isometric contractions in, 1035-1038 glycogen synthesis from lactate in, 183

MYFI IN

peripheral and central nervous system in alloxan-diabetic rats, 670-674

MYO-INOSITOL

metabolism

polyol pathway activity and, pathogenesis of diabetic neuropathy and, 988-991

MYOCARDIUM

of streptozotocin-diabetic rats adrenergic and cholinergic receptors in. 881-885

NALOXONE

insulin secretion and, 685

NAVAJO INDIANS

diabetic

prevalence of microvascular complications in, 894-898

NEPHROPATHY, 52-55*. See also Glomerulopathy, diabetic arterial blood pressure in, 84-87° autoregulation in kidney and, 72*

basement-membrane associated polyantigenic expansion in, 34-

39* defined, 52°

early detection of, 83* early hypertrophy-hyperfunction stage of, 65-66°

genetic hypothesis of, 54-55* glomerular lesions without clinical

disease, 66-69° hypertension and antihypertensive treatment and, 68*, 83-87* incipient stage of, 1*, 69-72*

irreversibility of, 53-54* overt stage of, 72-77* proteinuria mechanisms in, 40-45* remnant kidney model in rats of, 53°, 54*

risk factors of, 54* specificity of pathology of, 52-53* stages of, 64-77*

125I-NERVE GROWTH FACTOR

intravenous

retrograde axonal transport in streptozotocin-diabetic rats and, 654-663

NERVES

function diabetic control in teenagers and. 142-146

tibial

abnormalities in genetically diabetic mice, 1152-1160

NERVOUS SYSTEM

autonomic

evaluation of in diabetics, 398-399 in insulin-dependent diabetes, 827 sorbinil trial in diabetic neuropathy, 938-942

myo-inositol content

polyol pathway activity and, 988-991 penile nerve vasoactive intestinal polypeptide

in diabetic man and streptozotocindiabetic rats, 1075-1077

peripheral

abnormalities in genetically diabetic mice, 1152-1160

peripheral and central in alloxandiabetic rats

nonenzymatic glycosylation of myelin components in, 670-674 peripheral neuropathy in insulin-treated rats, 383-386

peripheral somatic and autonomic nerve function

metabolic control in teenage diabetics and, 142-146

in streptozotocin-diabetic rats retrograde axonal transport of intravenous 1251-nerve growth factor in, 654-663

NEUROPATHY, DIABETIC

autonomic

fibrinolytic activity in, circulation and, 4-6°

penile tissue vasoactive intestinal polypeptide-like immunoreactive nerves in, 1075-1077

in streptozotocin-diabetic rats, islet transplantation and insulin therapy in, 532-540

chronic, painful

sorbinil trial and, 938-942 in Hopi and Navajo Indians, 894-898 peripheral

sulin-induced in rats, 383-386 polyol pathway activity and myo-inositol metabolism in, 988-991

NEUROTENSIN

immunoreactive in pancreas of genetically diabetic obese mice, 51-53

NEUTROPHILS

interaction between glucose and dehydroascorbate transport in human, 545-548

NONENZYMATIC GLYCOSYLATION

peripheral and central nervous system myelin components in alloxan-diabetic rats, 670-674 susceptibility of fibrin to plasmin degradation and, 680-683

NOREPINCPHRINE

plasma levels in insulin-treated noninsulin-dependent diabetics, 1055-1059

NUTRITION

somatomedin and somatomedin inhibitors study in streptozotocin-diabetic rats and, 1117-1124

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

OBESITY

diabetes syndromes in mice and gastric inhibitory polypeptide abnormalities and, 433-434 effects of body composition on insulin

sensitivity and, 965-968

genetic in rats

liver insulin binding and removal and, 605-608

goldthioglucose-, in mice

effects of insulin and insulin-like growth factor on muscle protein synthesis in, 392-396

insulin resistance and

reduction by new antidiabetic agent, 804-810

in mice

and effect of ciglitazone on adipose tissue glucose and lipid metabolism, 839-845 oxytetracycline and insulin release in.

932-937

moderate, with normal glucose tolerance insulin secretion and action and, 600-604

and non-insulin-dependent diabetes carbohydrate oxidation and storage in, 982-987

overfeeding in rats with impaired glucose tolerance and, 1023-1026

OPIOID PEPTIDES

dynorphin

effect on insulin and somatostatin secretion, calcium uptake and c-AMP in rats, 685-689

ORGANS

from dogs with unanticipated amyloidosis after insulin infusion, 1092-1100 lactic acid producing, 181

OXALOACETATE

hepatic

in pups of canine diabetic mothers, 363

OXIDATIVE METABOLISM

defective

in heart mitochondria from genetically diabetic mice, 781-786

OXYTETRACYCLINE

insulin release in obese mice and, 932-937

PALMITATE

inhibition of triacylglycerol lipolysis in perfused hearts of normal and streptozotocin-diabetic rats, 718-722

PANCREAS

A-cell function in insulin-dependent diabetics

beta-adrenergic receptors and, 887-893

acini from diabetic rats

insulin and CCK receptors and enzyme secretion from, 241-245

anti-islet immunity in genetically diabetic

thymic dysfunction and, 1048-1053 beta-cell adaptation during prolonged

somatostatin infusion with glucagon replacement, 943-946 beta-cell DNA replication

in intact rat and islet cultures, 1172-1176

cultured rat islets

glucose influence on insulin handling in. 254-260

cysteamine-treated rat islet hormone release studies, 377-378

developing rat

insulin gene expression in, 691-696 dispersed islet tissue from dogs and pigs

exogenous proinsulin and insulin release from, 1162-1167

endocrine cells

fetal human, 293-300 from infants with erythroblastosis fetalis, 313-315

intracerebral allotransplantation in diabetic rats, 1185-1187

fetal

transplantation into diabetic rats, normalization of hepatic enzymes after, 730-733

fetal human

endocrine cell populations in, 293-300

fetal islets of Langerhans in prolonged organ culture

insulin secretion by, 915-920 fetal rat islets

transplantation into cerebral ventricles of alloxan-diabetic rats, 852-857

human

insulin gene expression in, 777-779

pups of canine diabetic mothers, 353 insulin output

suppression by somatostatin-14, in pulsatile vs. continuous insulin infusion, 617-620

islet β-cell replication in neonatal rat cultures

growth hormone and, 307-311 islet B-cells of fasted rats

response of mobile calcium to glucose and calcium in, 335-340

islet cell antibodies

complement-fixing cytoplasmic, and insulin secretion in insulindependent juvenile diabetics, 743-746

islet cell secretory activity

cell-to-cell communication and, 95-98

islet cell surface antibodies quantitation with 1251-protein A in insulin-dependent diabetics and normals, 460-464

islet hormones

effect of mammosomatotropic tumors on, 67-73

islet transplantation in streptozotocindiabetic rats

autonomic neuropathy and, 532-540 islets

effects of aging and diet in rats, 175-179

calcium uptake and content in fed and fasted rats and obese hyperglycemic mice, 124-129

rat to mouse intratesticular transplants, 213-216

in streptozotocin-treated mice immunosuppression and, 152

of streptozotocin-diabetic rats. proinsulin biosynthesis in, 277-282

isolated perfused dog secretin inhibition of glucagon

secretion in, 970-973 isolated rat islets of Langerhans effect of dynorphin on, 685-689

fatty acid incorporation into phosopholipids of, 6-12 mouse acini

chloroquine effect on insulin binding. distribution, and action in, 1102-1108

obese diabetic mouse

immunoreactive neurotensis in, 51-53 perfused rat

glucose-stimulated somatostatin and insulin release and glucose inhibition of glucagon release in, 561-566

perfused streptozotocin-diabetic rats glucose insensitivity and amino acid hypersensitivity of insulin release by, 445-451

perifused rat islets

pH and modification of glucoseinduced insulin release by, 61-66

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

polypeptides

in insulinoma patients, 921-930

rat β-cells

aging and regenerative capacity of,

rat islets

chloride modulation of secretion by, 416–423

cultured at low glucose, calcium ions and impaired glucose-induced insulin release from, 993–999

effects of retinoids on insulin release from, 568-573

endogenous prostaglandin synthesis and glucose-induced insulin secretion from, 509–514

from glibenclamide- and/or diazoxidetreated rats, β-cell gap junctions and dye coupling in, 858–868

mitochondrial adenine nucleotide translocase, insulin secretion and, 793–797

monolayer cultures, cell-to-cell communication studies, 95–98

proinsulin synthesis, effect of poly(ADP-ribose) synthetase inhibitor on, 316–318

rat and mouse islets

biphasic modulation of K+ permeability during acute glucose stimulation of, 820–823 and reflux of islet-containing fragments

into splenic veins in dogs normoglycemia after, 452–458

stomach and

somatostalin-like immunoreactivity and glucagon and insulin release in rat, 768–772

virus-induced diabetes in autoimmune New Zealand mice and, 755– 758

PANCREATECTOMY

in dogs

intravenous infusions of sulfated insulin and normalization of plasma glucose levels after, 788–791

in rhesus monkeys

blood-retinal barrier alterations in, 26*

PARACETAMOL POISONING

lactic acidosis and, 188

PENIS

vasoactive intestinal polypeptide-like immunoreactive nerves in diabetic rats and humans, 1075–1077

pH

effect on measurement of insulin binding by erythrocyte ghosts, 645–647 fructose infusion and lactic acidosis and, 187

glucose-induced insulin release by perifused rat pancreatic islets and, 61–66

lactate turnover in man and, 183–184 rat aortic ring prostacyclin synthesis and, 219

PHAEOCHROMOCYTOMA

lactic acidosis and, 188

187-188

PHAGOCYTES

mononuclear

in nonobese diabetic mice, 248-249

PHENFORMIN

development of lactic acidosis and,

PHENYLEPHRINE

fatty acid incorporation into isolated rat islet phospholipids and, 6-12

PHOSPHATE

renal tubular reabsorption in diabetic children, 28–32*

PHOSPHOENOLPYRUVATE

insulin secretion and adenine nucleotide translocase, 793–797

PHOSPHOLIPASE

inhibition, 11

fatty acid incorporation into phospholipids of rat pancreas islets and, 9--10

PHOSPHOLIPIDS

rat isolated pancreatic islets fatty acid incorporation into, 6-12

PHOSPHORYLATION

mannose

by glucokinase from liver and transplantable insulinoma, 1146– 1150

PHOTOCOAGULATION

diabetic maculopathy and clinical trial with xenon arc, 1010– 1016

fluorescein angiograms and quantitative evaluation of microaneurysms and, 8*

PIGS

hypothalamus

insulin binding by, 284-291

islet tissue from

effects of exogenous proinsulin on insulin release from, 1162–1167

PITUITARY-ADRENOCORTICAL AXIS

role in nocturnal insulin requirements of insulin-dependent diabetics, 403–407

PLACENTA

human membranes insulin binding studies in, 697–704

PLASMA

C-peptide

and insulin response to oral and intravenous glucose, 436–438 free fatty acids and glucose ketotic diabetes and, 389–390

free fatty acids, glycerol, triglycerides, and ketones

in pups of diabetic canine mothers, 355

glucagon, epinephrine, norepinephrine, and growth hormone in insulin-treated non-insulin-

dependent diabetics, 1055–1059 glucagon levels

T

in young, severe, insulin-dependent juvenile diabetics, 1168–1171

glucagon responses

in insulin-dependent diabetes, adrenergic contribution to glucose counterregulation and, 887–893

glucose infusion in newborn infants and, 489-491

glucose

diagnostic criteria for diabetes and, 343-351

after ingested and intravenous glucose loading in normal man, 977–980

physical training in normal humans and, 408–411 pulsatile vs. continuous insulin infusion

and, 619–620 sulfated insulin infusions in

pancreatectomized dogs and, 788–791 after xenografts from rats to mice,

213–216

glucose and alanine

β-hydroxybutyrate infusion in man and, 197–205

glucose, insulin, C-peptide, and free fatty acids

glycemic control in obese non-insulindependent diabetics and, 984 glucose, sodium, calcium, and

phosphate juvenile diabetes and, 28–32*

hydroxycorticosterone and aldosterone responsiveness

to angiotensin II or corticotropin, 1-4 in nonazotemic diabetes, 1-4

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1–100 February, 101–195 March, 197–292 April, 293–386 May, 387–487 June, 489–584 PAGE NUMBERS BY ISSUE Supplement 2, 1–104 July, 585–684 August, 685–780

immunoreactive insulin in dogs prostaglandin synthesis inhibitors and, 442

insulin and free fatty acids very-low-density lipoprotein triglycerides in non-insulindependent diabetics and, 271-276

insulin and glucose

exercise in streptozotocin-diabetic rats and, 165-168

insulin levels

effects on T-lymphocyte insulin receptors, 712-717

and splanchnic and peripheral glucose uptake in healthy subjects, 36-44

islet cell antibody-positive of juvenile diabetics

and inhibition of insulin release, 520-523

lipid, lipoprotein, and apolipoprotein levels

metabolic control of diabetics and. 20-24

lipids

erythrocyte membrane fluidity in diabetics and, 587 platelet interactions in diabetics, 14-16* platelet-specific β-thromboglobulin in

diabetics, 14* somatomedin-C in streptozotocindiabetic rats

changes in somatogenic and lactogenic liver binding sites and, 1060-1068

somatostatin-like immunoreactivity assay in healthy non-insulin-dependent diabetics, 723-729

testosterone in irradiated male mice hyperglycemic response to streptozotocin in, 148-154

β-thromboglobulin diabetes and, 48*

triglyceride, cholesterol, and lipoprotein lipase

response to therapy in non-insulindependent diabetics, 525-529 triglycerides in non-insulin-dependent diabetes

plasma insulin and free fatty acids and. 271-276 von Willebrand factor diabetes and, 17°

PLASMA MEMBRANES

liver and adipocyte anti-insulin antibody aggregation at insulin-occupied receptor sites of, 648-653

PLASMIN

conversion of plasminogen in diabetics, 17*

degradation of fibrin nonenzymatic glycosylation and reduction of, 680-683

PLASMINOGEN ACTIVATOR

fibrinolysis in diabetes and, 17* production in diabetics. 4-6*

PLETHYSMOGRAPHY

venous occlusion in diabetics, 4*, 5-6* blood flow changes near subcutaneous insulin

injection sites in stable and brittle diabetics, 466-473

PNEUMOCOCCAL POLYSACCHARIDE TYPE III

T-cell regulation of humoral immune response to in streptozotocin-diabetic mice, 156-

POLY(ADP-RIBOSE) SYNTHETASE INHIBITOR

effects on diabetic and nondiabetic rat islet proinsulin synthesis, 316-

POLYMORPHONUCLEAR LEUKOCYTES

in insulin-treated diabetics thromboxane B2 and prostaglandin E production by, 622-625

POLYOL PATHWAY

myo-inositol metabolism and pathogenesis of diabetic neuropathy and, 988-991

POLYPETIDES, PANCREATIC

deficiency in pancreatic fractions from infants with erythroblastosis fetalis, 313-315 in insulinoma patients, 921-930

POTASSIUM

pancreatic islets during acute glucose stimulation, 820-823 permeability of B-cell membranes chloride and, 421-422 prevention of thiazide diuretics induced glucose intolerance, 106-110 rat aortic ring prostacyclin synthesis in vitro and, 219

permeability in mouse and rat

H-PRAZOSIN

binding to alpha adrenergic receptors in streptozotocin-diabetic rat myocardium, 881-885

PREGNANCY, DIABETIC

in Chinese hamster developmental-stage-dependent teratogenesis and, 637-642

in dogs

fetal and neonatal metabolism in pups of, 352-358, 360-367 effects of insulin on early mouse embryogenesis, 1070-1073 in rats, skeletal malformations in offspring of insulin withdrawal studies of, 1141-

PROINSULIN

antibodies

in insulin immunogenicity study, 595-

biosynthesis in vitro

1145

in rat model of non-insulin-dependent diabetes, 277-282

levels in insulinoma patients, 921-930 mRNA

in analysis of insulin gene expression in human pancreas, 777-779 and insulin biosynthesis in developing rat pancreas, 691-696

PROLACTIN

in insulin-treated diabetic and semistarved male rats, 113-115

PROPRANOLOL

plasma glucose recovery from hypoglycemia in insulindependent diabetes and adrenergic receptors and, 887-893

PROSTACYCLIN

C-arachidonic acid conversion to in streptozotocin-diabetic rat tissue, insulin and tolbutamide treatment and, 846-850 endothelial cell synthesis in diabetics and. 17 rat aortic rings synthesis in vitro

metabolic abnormalities and, 217-220

PROSTAGLANDIN

platelet and endothelial function in diabetics and, 14* synthesis in rat pancreatic islet, 509-514

PROSTAGLANDIN E

effects on glucose homeostasis and insulin secretion, 231-233 production by polymorphonuclear leukocytes from insulin-treated diabetics, 622-625

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

PROSTAGLANDIN SYNTHESIS INHIBITORS

liver glucose production in response to glucagon and epinephrine stimulation and, 439–443

PROTEIN

calmodulin-binding in cloned rat insulinoma cell line, 1126–1132

dietary effect on aromatic and branchedchain amino acids in streptozotocin-diabetic rats, 222–230

222–230
glomerular filtration of
determinants in insulin-dependent
diabetes, 92–95*
diabetic nephropathy and, 41–42*
synthesis in muscles from lean and
obese mice
insulin and insulin-like growth factor (
and, 392–396

124-PROTEIN A

quantitation of islet cell surface antibodies using, 460-464

PROTEINURIA

determinants of glomerular filtration of proteins in insulin-dependent diabetics and, 92–95* mechanisms of in diabetic nephropathy, 40–45, 73–

PROTEOGLYCANS

heparin sulfate reduced sulfation of in diabetic rats, 337–341

PROTEOLYSIS

and infusion of β-hydroxybutyrate in man, 197–205

PYRUVATE KINASE

normalization after fetal pancreas transplantation in diabetic rats, 730–733 of red blood cells and monocytes insulin receptors and differences between, 1017–1021

F

RABBITS

effects of polyethylene glycol insulin on adipose tissues from, 953–957

RACE

hyperlipemia in insulin-dependent diabetics and, 22

RADIOIMMUNOASSAYS

and short-acting soluble insulin mixed with long-acting insulin recovery by, 1177–1180

RATS

adipocytes

degradation of insulin receptors in, 1001–1008

structure of insulin receptors of, 760-766

alloxan-diabetic

comparison of isometric contractions in fast and slow skeletal muscle of, 1035–1038

effect of aldose reductase inhibitor on lens metabolites in, 482–485 nonenzymatic glycosylation of

peripheral and central nervous system myelin components in, 670–674

transplantation of fetal rat islets into cerebral ventricles of, 852-857

alloxan- and streptozotocin-diabetic effect of poly(ADP-ribose) synthetase inhibitor on islet proinsulin in, 316–318

aortic rings prostacyclin synthesis in vitro

metabolic abnormalities and, 217–220 cloned insulinoma cell line from calmodulin-binding proteins in, 1126–1132

cultured adipocytes kinetics of insulin receptor biosynthesis and membrane insertion in, 319–324

cultured islets glucose influence on insulin handling by, 254–260

cysteamine administration in somatostatin secretion and insulin and glucagon release and, 377–378 diabetic

endothelial cell prostacyclin production in, 17* mesangial accumulation in, 2* platelet microthrombi in, 17–18*

effects of polyethylene glycol insulin on adipose tissues from, 953–957 fasted, pancreatic islets of

response of mobile calcium to glucose and calcium, 335–340

fed and fasted effect of glucose on calcium uptake and content of pancreatic islets

of, 124-129 genetically obese

insulin binding and removal by livers of, 605-608

glibenclamide- and/or diazoxide-treated and modification of gap junction and dye coupling between B-cells of islets of Langerhans of, 858–868

glucose intolerance, overfeeding, and weight gain in and brown adipose tissue cellularity, 1023–1026

glucose stimulation of beta-cell DNA replication in, 1172–1176

growth hormone-deficient diabetic somatomedin inhibitors in serum and liver of, 262-264

insulin-induced peripheral neuropathy in, 383-386

insulin secretion and action in effects of aging and diet on, 175–179 insulin-treated streptozotocin-diabetic and semi-starved

sertoli cell function in, 112-115 islet cells insulin release

effects of retinoids on, 568–573 islet mitochondrial adenine nucleotide translocase interaction with

phosphoenolypyruvate, 793–797 islet xenografts intratesticular transplants to mice,

213–216

islets

biphasic modulation of K+ permeability during acute stimulation with glucose, 820– 823

cultured at low glucose, calcium ions and impaired glucose-induced insulin release from, 993–999

effects of chloride on, 416–423 effects of retinoids on cell-to-cell adhesion, reaggregation and insuiin release in, 568–573

endogenous prostaglandin synthesis and glucose-induced insulin secretion by, 509–514 fatty acid incorporation into

phosophlipids of, 6–12 glucose stimulation of DNA replication in, 1172–1176

monolayer cultures, cell-to-cell communication studies in, 95–98

pH and insulin release by, 61-66 isolated islets

effect of dynorphin on insulin and somatostatin secretion, calcium uptake, and cyclic AMP, 685– 689

liver or insulinoma glucokinase mannose phosphorylation by, 1146– 1150

mammosomatotropic tumors in effects on pancreatic islet hormones, 67–73

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

January, 1–100 April, 293–386 February, 101–195 May, 387–487 March, 197–292 June, 489–584 PAGE NUMBERS BY ISSU Supplement 2, 1–104 July, 585–684 August, 685–780

moderate insulin deficiency in and effect of exercise and diet on triglyceride metabolism in, 46-

neonatal pancreatic monolayer cultures growth hormone stimulation of β-cell replication in, 307-311

pancreas

B-cells, aging and regeneration of, 14-18

developing, insulin gene expression in, 691-596

perfused pancreas

dissociation of glucose action on somatostatin and insulin release and inhibition of glucagon release, 561-566

reduction of insulin resistance by new antidiabetic agent in, 804-810 remnant kidney model in, 53*

serum inoculated with glucosylated collagen

antigenicity studies of, 1182-1189 spontaneously diabetic

effects of glucocorticoids, cyclosporin-A, and antilymphocyte serum on, 326-329

streptozotocin-diabetic

adrenergic β-receptor adenylate cyclase system in heart and lymphocytes of, isoproterenol and, 1110-1115

age-simulated changes in intact dermal collagen of, 739-742

blood and brain amino acids and, 222-230

effect of cholesterol feeding and alterations in bile acid homeostasis on sterologenesis in, 368-376

effect of exercise and sucrose on insulin-stimulated glucose uptake in, 165-168

effect of islet transplantation on autonomic neuropathy in, 532-

fetal pancreas transplantation into, normalization of hepatic enzymes after, 730-733

glucose insensitivity and amino acid hypersensitivity to insulin release in perfused pancreas from, 445-451

hyperphagia and alteration of cholesterol dynamics in, 811-

impaired activation of glycogen synthase and depressed synthase phosphatase in, 1134-1139

insulin or tolbutamide effects on 14Carachidonic conversion to prostacyclin or thromboxane in, 846-850

intestinal uptake of bile acids in, 900-906

intracerebral allotransplantation of purified pancreatic endocrine cells in, 1185-1187

ketotic and normal, triacylc' rerol lipolysis in perfused hearts from, 718-722

lack of glucagon response to hypoglycemia in, 55-59 liver glycosyltransferases and, 412-

415 liver heparan sulfate sulfation in, 337-341

as model of non-insulin-dependent diabetes proinsulin biosynthesis in, 277-282

myocardial adrenergic and cholinergic receptors from, 881-885

pancreatic acini from, insulin effects on CCK receptors of, 241-245 plasma somatomedin-C in, changes in

somatogenic and lactogenic liver binding sites and, 1060-1068 pregnancy and insulin withdrawal

study in, skeletal malformations in offspring, 1141-1145 renai slices from, vitamin D metabolite

production by, insulin and, 302-305

retrograde axonal transport of intravenous 1251-nerve growth factor in, 654-663

slow release of insulin from, biodegradable matrix implanted in, 478-480

somatomedin inhibitor studies in, 1117-1124

sorbinil blockade of polyol pathway and nerve and myo-inositol content in, 988-991

vasoactive intestinal polypeptide-like immunoreactive nerves in penile tissue from, 1075-1077 vitreous fluorophotometry in, 24-25*

streptozotocin diabetic and normal glucosylated and normal albumin renal basement membrane

binding in, 380-382 potentiation of insulin action in, 206-211

86 Rb+

efflux

K+ permeability in pancreatic islets during acute glucose stimulation and, 820-823

RESPIRATION

gas exchange in obese non-insulindependent diabetics, 983-984

RESTRICTION ENDONUCLEASE

identification of point mutation in human insulin gene and, 872-875 of rat insulin genes during development, 693-695

RETINA

-blood barrier in diabetic retinopathy and, 20-27°

RETINOPATHY

antiplatelet agents and, 18° blindness from, 20* blood-retinal barrier and, 20-27* in diabetic Hopi and Navajo Indians, 894-898

diabetic nephropathy and, 84* diabetic nephropathy diagnosis and, 41* fibrinolytic response and, 4-6* fluorescein angiograms and

microaneurysm counts and, 8-

in non-insulin-dependent diabetics insulin resistance and deficiency in, 82-87 platelet enzyme activities in diabetics

and, 47-50* red cell changes in diabetics and, 99* vitreous fluorescence and, 2*

RHESUS MONKEYS

diabetic

blood-retinal barrier alterations in, 26*

RHEUMATOID ARTHRITIS

T-lymphocyte abnormalities in, 93

RIBONUCLEASE

secretion by isolated pancreatic acini from streptozotocin-diabetic rats insulin and, 241-245

S3-BENTONITE ADHERENCE

TEST, 157-158

SECRETIN

inhibition of glucagon in isolated perfused dog pancreas, 970-973

SERTOLI CELLS

function in insulin-treated diabetic and semi-starved male rats, 112-115

SERUM

alucose

insulin species of origin, formulation and purification levels and, 596

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

glucose levels in non-insulin-dependent diabetics

relationship between glucose metabolic clearance rate and, 627-632

hormones

in insulin-treated diabetic and semistarved male rats, 112-115

insulin

glucose infusion in newborn infants and, 489-491

intranasal insulin administration with aerosol and, 1040-1047 suppressibility by somatostatin and

diazoxide in insulinoma patients,

osmolality

insulin-mediated glucose metabolism and, 1028-1033

somatomedin inhibitors

in growth hormone-deficient diabetic rats, 262-264

in streptozotocin-diabetic rats somatomedin inhibitors study with, 1117-1124

T3, in fed and fasted streptozotocindiabetic rats

glucagon and, 798-802 thymic factor levels

evaluation of thymic function in genetically diabetic mice and, 1048-1053

SEX

aldosterone biosynthesis in diabetics and, 1-4

hyperlipemia in insulin-dependent diabetics and, 22

platelet monoamine oxidase activity in insulin-dependent and noninsulin-dependent diabetics and, 130-132

SHOCK

lactic acidosis with, 189

SKIN

collagen

and streptozotocin diabetes in rats, 739-742

SODIUM

renal tubular reabsorption in diabetic children, 28-32*

SODIUM BICARBONATE

in lactic acidosis therapy, 189

SODIUM DICHLOROACETATE

in lactic acidosis therapy, 189

SOMATOMEDIN-C

plasma levels in streptozotocin-diabetic

correlation with changes in liver somatogenic and lactogenic binding, 1060-1068

SOMATOMEDIN INHIBITORS

in serum and liver of growth hormonedeficient diabetic rats, 262-264 in streptozotocin-diabetic rats, 1117-

SOMATOSTATIN

circulating concentrations in healthy, non-insulin-dependent diabetics, 723-729

glucoregulation in hypophysectomized alloxanized dogs and, 29-30

glucose-stimulated release of dissociation of glucose inhibition of glucagon release and, 561-566

infusion with glucagon replacement in man

hyperglycemia and β-cell adaptation, 943-946

like immunoreactivity

assay in healthy, non-insulin-dependent diabetics, 723–729 reciprocal gastropancreatic

modulations and release of, 768-772

secretion

inhibition by cysteamine in rats, 377-

in isolated rat islets of Langerhans, dynorphin and, 685-689 suppression of serum insulin in insulinoma patients, 921-930

14-SOMATOSTATIN

suppression of pancreatic insulin output in study of pulsatile vs. continuous insulin infusion, 617-620

SORRINII

chronic painful diabetic neuropathy and, 938-942

effect on lens metabolite levels in diabetic rats, 482-485 polyol pathway blockade in

streptozotocin-diabetic rats nerve myo-inositol content and, 988-991

SORBITOL

lens level in diabetic rats effect of aldose reductase inhibitor on. 482-485

SPLANCHNIC

glucose disposal in man, 675-678 glucose uptake

hyperinsulinemia and hyperglycemia in healthy subjects and, 36-44

antibody producing cells in nonobese diabetic mice, 248-250 T-cell regulation of humoral immune response

in diabetic mice, 156-163 vascular bed, reflux of islet-containing pancreatic fragments into normoglycemia in dogs and, 452-458

STARVATION

insulin treatment and Sertoli cell function in male rats and, 112-115

STEROL

metabolism

hyperphagia in streptozotocin-diabetic rats and, 611-618

STEROLOGENESIS

in streptozotocin-diabetic rats effect of cholesterol feeding and alterations in bile acid homeostasis and, 368-376

STOMACH

somatostatin-like immunoreactivity glucagon, and insulin release in rat and. 768-772

STREPTOZOTOCIN DIABETES

in fed and fasted rats

glucagon and T3 metabolism study in, 798-802

in growth hormone deficient rats somatomedin inhibitors in serum and liver of, 262-264

in mice

effect of immunosuppression on, 148-154

suppressive effect of antibodies to immune response gene products on development of, 869-871

in rat model of non-insulin-dependent diabetes

proinsulin biosynthesis in, 277-282 in rats

adrenergic β-receptor adenylate cyclase system in heart and lymphocytes, isoproterenol and, 1110-1115

age-stimulated changes in intact dermal collagen in, 739-742 antibodies binding glucosylated

collagen in, 1182-1189 aromatic and branched-chain amino acids in blood and brain of.

222-230 ciglitazone studies in, 830-837

effect of cholesterol feeding and alterations in bile acid homeostasis on sterologenesis in, 368-376

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

effect of poly(ADP-ribose) synthetase inhibitor on islet proinsulin synthesis, 316-318

effects of exercise and diet on triglyceride metabolism in, 46-50

exercise and sucrose effects on insulin-stimulated glucose uptake in, 165-168

fetal pancreas transplantation into, normalization of hepatic enzymes after, 730-733

glucose insensitivity and amino acid hypersensitivity of insulin release by perfused pancreas, 445-451

glucosylated and normal albumin binding to renal basement membranes in, 380-382

hyperphagia and alteration of cholesterol dynamics in, 811-

impaired liver glycogen synthase activation and depressed synthase phosphatase in, 1134-1139

insulin action in hepatocytes and tolazamide in, 206-211

insulin or tolbutamide effects on 14Carachidonic acid conversion to prostacyclin or thromboxane. 846-850

insulin-treated males, Sertoli cell function in, 112-115

intestinal disaccharidase activity in. 265-270 intestinal uptake of bile acids in, 900-

intracerebral allotransplantation of

purified pancreatic endocrine cells in, 1185-1187

islet transplantation and autonomic neuropathy in, 532-540

isolated acini from, insulin modulation of CCK receptors and enzyme secretion, 241-245

ketosis and, regulation of triacylglycerol lipolysis in perfused hearts from, 718-722

lack of glucagon response to hypoglycemia in, 55-59 liver glycosyltransferases activities

and, 412-415 liver heparan sufate sulfation in, 337-

341 myocardial adrenergic and cholinergic receptors from, 881-885

plasma somatomedin-C levels and changes in liver somatogenic and lactogenic binding in, 160-168

retrograde axonal transport of intravenous 1251-nerve growth factor in, 654-663

slow release of insulin from biogradable matrix implanted in, 478-480

somatomedin inhibitor study in, 1117-1124

sorbinil blockade of polyol pathway and nerve myo-inositol content in. 988-991

vasoactive intestinal polypeptide-like immunoreactive nerves in penile tissue from, 1075-1077

vitamin D metabolite production by renal slices from, insulin and, 302-305

vitreous fluorophotometry in, 24-25* in rhesus monkeys

blood-retinal barrier alterations in, 26*

SUCRASE, See Disaccharidases

SUCROSE

-fed streptozotocin-diabetic rats effects on insulin secretion and action, 175-179 insulin-stimulated glucose uptake and,

165-168 triglyceride metabolism in, 46-59

SULFATION PROCEDURE

for preparation of high-potency, nonaggregating insulins, 1087-1091

SULFONYLUREAS

therapy in non-insulin-dependent diabetics

and plasma triglyceride, cholesterol and lipoprotein lipase levels, 526-529

tolazamide insulin action in normal and diabetic rats, 206-211

SURGERY

hypophysectomized alloxan-diabetic dogs

glucoregulation in, 26-32 pancreatectomized dogs

insulin and plasma glucose in, 788-791 thymectomy in streptozotocin-diabetic

mice, 148-154 vascular split for study of monkey and pig hypothalamus insulin binding, 285-286

SYNTHASE PHOSPHATASE ACTIVITY

of streptozotocin-diabetic rat liver impaired glycogenic substrate activation of glycogen synthease associated with, 1134-1139

T-CELLS

and impaired regulation of humoral immune response in diabetic mice, 156-163

T-LYMPHOCYTES

abnormalities, monoclonal antibodies defined in insulin-dependent diabetics, 91-93

activity in nonobese diabetic mice, 248, 251-253

insulin receptors

in vitro control by in vivo modulation of insulin, 712-717 insulitis in mice and, 148-154

TERATOGENESIS and diabetic pregnancy in rats, 1141-1145

insulin in whole embryo cultures and, 1070-1073

maternal spontaneous diabetes in Chinese hamster and, 637-642

THERMOGRAPHY

in diabetics, 5-6*

THIAZIDE DIURETICS

induced glucose intolerance body potassium levels and, 106-110

B-THROMBOGLOBULIN

plasma levels in diabetics, 14*, 48-49*

THROMBOXANE

C-arachidonic acid conversion to in streptozotocin-diabetic rat tissues

effects of insulin or tolbutamide treatment on, 846-850

B2-THROMBOXANE

production by polymorphonuclear leukocytes from insulin-treated diabetics, 622-625

THYMECTOMY

effects on streptozotocin-diabetic mice, 148-154

THYMUS GLAND

dysfunction

and anti-islet immunity in genetically diabetic mice, 1048-1053

TISSUE

adipose

from non-insulin-dependent diabetics with reduced glucose tolerance and insulin binding and responsiveness, 748-753

of obese and lean mice, effects of ciglitazone on glucose and lipid metabolism and insulin binding in, 839–845

of rats with impaired glucose tolerance, effect of overfeeding on cellularity of, 1023–1026

of rats and rabbits, effects of polyethylene glycol insulin in, 953–957

hepatic and extrahepatic

insulin receptor specificities in, 697– 704

human adipose

aging and insulin receptor binding and metabolic effects of insulin on, 959–964

insulin sensitivity

body composition and, 965-968 kidney

basement membrane in nephropathy, 34–39*

myocardial, from genetically diabetic mice

defective oxidative metabolism in, 781–786

peripheral

oral glucose disposal in man, 675-678

rat adipocytes

degradation of insulin receptors in, 1001–1008

from streptozotocin-diabetic rats effects of insulin or tolbutamide treatment on arachidonic acid conversion to prostacyclin or thromboxane in, 846–850

TOLBUTAMIDE

*C-arachidonic acid conversion to prostacyclin and/or thromboxane in streptozotocindiabetic rat tissues and, 846– 850

effects on rat islets chloride and, 416-423

fatty acid incorporation into rat isolated pancreatic islet phospholipids and, 6–12

TRANSPLANTATION

fetal pancreas in diabetic rats normalization of hepatic enzymes after, 730–733

fetal rat islets into cerebral ventricles of alloxan-diabetic rats, 852–857 intracerebral in streptozotocin-diabetic

rats of purified pancreatic endocrine cells, 1185–1187 intratesticular islet xenografts

ntratesticular islet xenograf rat to mouse, 213–216 islet, in streptozotocin-diabetic rats autonomic neuropathy and, 532–540 kidney, in diabetics

development of glomerular basement membrane and mesangium lesions after, 948–952

TRIACYLGLYCEROLS

lipolysis in perfused hearts of normal and ketotic diabetic rats, 718– 722

TRIGLYCERIDE

hepatic stores in pups of canine diabetic mothers, 361–366

metabolism in rats with moderate insulin deficiency

effect of exercise and diet on, 46–50 plasma, response to therapy in non-insulin-dependent diabetes, 525–529

TUMORS

human insulinomas functional and morphologic characterization of, 921–930 mammosomatotropic pancreatic islet hormones and, 67–73

TWINS

identical

discordant for insulin-dependent diabetes, muscle capillary basement membrane widths in, 557–560

monozygotic

relationship between diabetes and muscle capillary basement membrane width in, 549–55

U

UMBILICAL VEIN

endothelial cell glucose concentrations and Factor VIIIR:Ag levels, 876– 878

URINE

albumin excretion diabetic nephropathy evaluation and, 66–69*, 83–88*

excretion rates of glucose, sodium, calcium, and phosphate in diabetic children, 28–32*

glucose

fetal pancreas transplantation in diabetic rats and, 730–733 immunoglobulin G losses

proteinuria in diabetic nephropathy, 40-45*

potassium loss

thiazide diuretics-induced glucose intolerance and, 106–110

٧

VALSALVA MANEUVER

autonomic neuropathy and, 5*

VASCULAR DISEASE

antiplatelet agents and, 18* capillary basement membrane changes in diabetics and, 96–99*

microvascular complications in diabetic Hopi and Navajo Indians, 894– 898

peripheral

platelet enzymes in diabetics and, 47-50*

platelet and endothelial function and, 14-18*

VASCULAR SYSTEM

endothelium fibrinolytic activity in diabetics and, 4-

retinal

retinopathy and, 22-23*

VASOACTIVE INTESTINAL POLYPEPTIDE

in nerves in human and rat penile tissue diabetes and, 1075–1077

VEINS

human umbilical endothelial cells glucose concentration and Factor VIIIR:Ag levels in, 876–878 occlusion

fibrinolytic response in diabetics, 4* prostacyclin production in diabetics, 17* splenic

reflux of islet-containing pancreatic fragments into, normoglycemia in dogs and, 452–458

VIRUS

-induced diabetes in New Zealand mice, 755-758

VISION

diabetic maculopathy and xenon arc photocoagulation and, 1010-1016

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE

April, 293–386 May, 387–487

May, 387-487 June, 489-584 PAGE NUMBERS BY ISSU Supplement 2, 1–104 July, 585–684 August, 685–780

September, 781–880 October, 881–975 November, 977–1082 December, 1083–1220

January, 1-100

February, 101-195

March, 197-292

VITAMINS

D metabolites production by renal slices from streptozotocin-diabetic rats, insulin and, 302–305

VON WILLEBRAND FACTOR

levels in diabetics, 2*, 17*, 49* platelet aggregation in diabetics and, 50*

W

WATER

glomerular filtration of diabetic nephropathy and, 41*, 42* hyperosmolality insulin-mediated glucose metabolism and, 1028–1033

weight. See also Body; Obesity gain, and overfeeding in rats with impaired glucose tolerance, 1023–1026

<u>X</u>

XENOGRAFTS

islet

intratesticular rat to mouse transplants of, 213-216

XENON ARC

photocoagulation for diabetic maculopathy with, 1010-1016

Author Index

Abrams, Marc A., 284-292 Adamson, Ulf, 633-636 Akerblom, Hans K., 743-747 Al-Jurf, A.S., 265-270 Alberti, K.G.M.M., 723-729 Albisser, A. Michael, 424-432, 788-792. 1092-1101 Alexander, Charles M., 516-519 Almer, Lars-Olof, 4-7* Amatruda, John M., 206-212 Andersen, Allan R., 83-87* Andersen, Dana K., 106-111 Anderson, Carol E., 169-174 Andreani, D., 91-94 Andres, Reubin, 106-111 Angeletti, Gabriella, 134-141, 887-893 Anthony, M., 326-330 Archer, Juanita A., 755-759 Armbrecht, H. James, 302-306 Arner, Peter, 117-123, 959-964 Assan, Roger, 768-773, 1048-1054

В

Baekkeshov, Steinunn, 520-524 Bahoric, Andrej, 788-792, 1092-1101 Bailbe, Danielle, 445-451 Bailey, Anne, 1102-1109 Bailey, Clifford J., 433-435 Bajaj, V.R., 1117-1125 Baranetsky, Nicholas G., 568-574 Barbosa, Jose, 948-952 Barnett, A.H., 557-560 Bassiouny, A.R., 1182-1184 Baudoin, C., 8-13* Bauman, Mitchel D., 718-722 Beamer, W.G., 148-155 Beard, James C., 943-947 Bégin-Heick, Nicole, 932-937 Bellavere, F., 101-105 Berchtold, Peter, 921-931 Berelowitz, Michael, 51-54 Beretta-Piccoli, Carlo, 1-5 Bergenstal, R.M., 398-402 Berger, Michael, 921-931 Berhanu, Paulos, 1001-1009 Bernstein, Marcy, 988-992 Best, James D., 525-531, 943-947 Beverley, P.C.L., 91-94 Bielefeld, David, 337-342 Bigley, R., 545-548 Billett, Ellen, 130-133

Blacklay, P.F., 1075-1077 Boarman, Christopher C., 516-519 Bobzien, Bonnie, 231-216 Boden, Guenther, 982-987, 1055-1059 Boillot, Dominique, 1048-1054 Bolinder, Jan, 117-123, 959-964 Bolli, Geremia, 134-141, 887-893 Bonnell, Mark D., 894-899 Bonner-Weir, Susan, 277-283 Bordi, Cesare, 921-931 Borsey, D.Q., 101-105 Bottazzo, G.F., 91-94 Boucek, R.J., 739-742 Bowcock, Salley, 466-473 Boyd, A.E., III, 1126-1133 Bradford, M.W., 793-797 Brandenburg, Dietrich, 1001-1009 Bratusch-Marrain, Paul R., 1028-1034 British Multicentre Study Group, 1010-1016 Brochner-Mortensen, Jens. 28-33* Brown, David M., 52-55*, 380-382 Brown, J., 730-733 Brown, Nancy, 734-738 Brownlee, Michael, 499-504, 670-674, 680-684, 1087-1091

C

Brunetti, Paolo, 134-141, 887-893

Brunzell, John D., 525-531

Busby, Barbara E., 156-164

Burnstock, G., 1075-1077

Calles, Jorge, 734-738, 1023-1027 Camagna, Antonio, 1017-1022 Campbell, G.T., 112-116 Caprari, Patrizia, 1017-1022 Carey, Martin C., 1040-1047 Carpenter, C.B., 549-556 Carson, S., 1092-1101 Cartechini, Maria G., 134-141 Cerami, Anthony, 499-504, 670-674, 680-684, 1087-1091 Chafouleas, James G., 1126-1133 Chang, Albert Y., 830-838, 839-845 Chang, Fred, 46-50, 165-168 Chang, Helen, 46-50, 165-168 Chen, Mei S., 1078-1081 Chertow, Bruce S., 568-574 Chervenak, Carol L., 894-899 Chirgwin, John M., 777-780 Chou, Sheng, 478-481 Chow, J.C., 424-432 Christensen, C.K., 64-78*

Christiansen, Jens Sandahl, 83-87* Ciaraldi, T., 697-704 Clark, Adrian, 466-473 Clark, W.R., 730-733 Clark, William, 1162-1167 Clarke, Basil F., 101-105, 142-147, 938-942 Clement, J.R., 424-432 Clements, Rex S., Jr., 509-515 Clutter, William E., 825–829 Cohen, Robert D , 181–191 Colwell, John A., 14-19*, 20-25, 876-878, 908-914 Compagnucci, Pietro, 134-141, 887-893 Congleton, Jane E., 169-174 Conlon, J.M., 723-729 Connett, John, 948-952 Cooke, Ernest, 466-473 Coscas, G., 8-13* Crandall, Elizabeth A., 222-230 Crowe, R., 1075-1077 Cryer, Philip E., 403-407, 825-829 Cudworth, A.G., 91-94 Cunha-Vaz, Jose, 20-27* Cunningham, John J., 734-738, 1023-1027 Cunningham, L.N., 664-669 Cüppers, Hans-J., 921-931 Curnow, Randall T., 1134-1140 Cvet, David, 1172-1176 Czech, Michael P., 541-544

D

Dahlström, E., 1141-1145 Dall'aglio, Elisabetta, 46-50, 165-168 Dalpé-Scott, Marthe, 932-937 Dandona, P., 217-221 Dardenne, Mireille, 1048-1054 Davie, Joseph M., 213-216 Davis, Bernard B., 302-306 De Cosmo, Salvatore, 887-893 De Feo, Pierpaolo, 134-141, 887-893 De Pirro, Roberto, 1017-1022 Debray-Sachs, Monique, 1048-1054 DeFronzo, Ralph A., 35-45, 675-679, 1028-1034 DeWitt, Janet, 412-415 Diani, A.R., 830-838 Digirolamo, Mario, 748-754 Dinsdale, F., 313-315 Ditzel, Jorn, 28-33* Dockery, P., 1152-1161 Douglas, Marlene, 1162-1167

January, 1-100 February, 101-195 March, 197-292

April, 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

AUTHOR INDEX 1983

Duckworth, William C., 705-711 Dunn, Fredrick L., 75-81

Efendic, Suad, 633-636 Eisikowitz, Leon, 1023-1027 Elahi, Dariush, 106-111 Elde, Robert P., 377-379, 561-567 Elden, H.R., 739-742 Eriksson, U.J., 1141-1145 Evans, Marilyn H., 509-515 Ewart, R.B.L., 793-797 Ewing, David J., 101-105, 142-147, 938-942

Falk, Ronald J., 34-39* Faller, A., 557-560 Fallucca, F., 489-492 Feingold, Kenneth R., 368-376 Felig, Philip, 35-45, 734-738, 1023-1027 Fernstrom, John D., 222-230 Ferrannini, Eleuterio, 35-45, 675-679 Fineberg, Naomi S., 592-599 Fineberg, S. Edwin, 592-599 Finegold, David, 988-992 Flatt, Peter R., 433-435 Flier, Jeffrey S., 1040–1047 Forsham, Peter H., 1177–1181 Forte, Leonard R., 302-306 Frank, Bruce H., 697-704, 705-711 Frank, Kay E., 505-508 Frank, William, 1162-1167 Fraser, Robert, 1-5 Freedman, Z., 460-465 Freidenberg, Gary F., 541-544, 697-704 Freinkel, Norbert, 820-824 Friedman, Stuart, 40-46* Frohman, Lawrence A., 51-54 Fujita, Takeshi, 804-810 Fujiya, Hiroshi, 247-253 Funaki, Kenji, 637-643 Fusco, A.C., 1117-1125

G

Gabriel, G., 1152-1161 Galloway, John A., 592-599 Ganda, O.P., 549-556 Ganguli, S., 439-444 Garovoy, M.R., 549-556 Gavin, Laurence A., 798-803 Genuth, Saul M., 284-292 Georgiou, H.M., 915-920 Gepts, Willy, 1048-1054 Gerber, P.P.G., 387-391 Gerich, John E., 134-141, 197-205, 887-893

January, 1-100

February, 101-195

March, 197-292

Giacomelli, Filiberto, 781-787 Giangrande, L., 489-492 Giddings, Stephen J., 691-696, 777-780 Gilchrist, Barbara J., 830-838, 839-845 Giroix, Marie Hélène, 445-451 Gleason, R.E., 549-556, 664-669 Glickman, Morton G., 675-679 Goetz, Frederick C., 52-55* Golbetz, Helen V., 40-46* Goldfine, Ira D., 1102-1109 Goldman, Jose, 592-599 Gonzalez, Ana-Maria, 482-485 Goosen, Mattheus, F.A., 478-481 Gordon, Gilad S., 1040-1047 Gotzsche, Ole, 1110-1116 Grasso, S., 293-301, 489-492 Green, I.C., 685-690 Greene, Douglas A., 988-992 Greenfield, Michael, 600-604 Gries, F. Arnold, 921-931 Grodsky, Gerold M., 1177-1181 Grossie, J., 1035-1039 Grouse, Lynette H., 377-379 Grundy, Scott M., 75-81 Guberski, D.L., 326-330 Gundersen, H.J.G., 79-82*

Halban, Philippe A., 254-261, 277-283, 858-868 Halter, Jeffrey B., 525-531, 943-947 Halushka, Perry V., 14-19* Haneda, M., 460-465 Hanley, Simon, 130-133 Hara, Hitoshi, 343-351 Harris, H.L., 474-477 Hartfel, Margaret A., 67-74 Haskell, W.L., 408–411 Hayes, T., 8–13* Haymond, Morey W., 197-205 Hegre, Orion D., 67-74 Heick, H.M.C., 932-937 Heidenreich, Kim A., 1001-1009 Helderman, J. Harold, 106-111, 712-717 Hellerstrom, C., 1141–1145 Helman, A.M., 768–773 Hemmelgarn, Edward, 284-292 Hendler, Rosa, 35-45 Henquin, Jean-Claude, 416-423 Heptinstall, Stanley, 130-133 Hilsted, Jannik, 436-438 Hirayama, Hiroki, 331-336 Hisatomi, Akitaka, 970-973 Ho, H., 175-180 Hoeldtke, Robert D., 1055-1059 Hoffmann, P., 557-560 Hollins, G.W., 1152-1161 Hook, Magnus, 337-342 Hooker, Carol S., 705-711 Hoopes, Michael T., 516-519 Horikoshi, H., 697-704

Horlyck, A., 79-82* Horton, W.E., Jr., 610-616, 1070-1074 Horvat, Agnes, 284–292 Howard, Barbara V., 271–276 Howell, S.L., 685-690 Huen, A.H.-J., 460-465 Hutchinson, Martha L., 1078-1081 Hutson, James C., 112-116

lavicoli, M., 91-94 Inculet, R., 977-981 Ito, Chikako, 343-351 Itoh, Kyogo, 247-253 Itoh, Tojuji, 331-336 Iwamoto, Yasuhiko, 1102-1109 Iwatsuka, Hisashi, 804-810

Jakobsen, Johannes, 383-386 Janjic, Danilo, 993-1000 Janka, H.U., 47-51* Jarett, Leonard, 648-653 Jaspan, J.B., 398-402 Jeanrenaud, Bernard, 605-609 Jeraj, Karim P., 380-382 Jeremy, J.Y., 217-221 Johnson, Eugene M., Jr., 654-663 Jones, G., 8-13* Jones, Henry W., III, 40-46* Jones, R.G., 617-621 Judzewitsch, Roman G., 525-531 Juhan, Irene, 88-91*

Kager, Lars, 117-123 Kakita, Keiji, 691-696 Kaldany, A., 549-556 Kamada, Tetsuro, 585-591 Kanatsuna, Takahiro, 520-524 Kao. M., 697-704 Karakash, Clairette, 605-609 Karam, John H., 1177-1181 Kasuya, Yasuji, 331-336 Kataoka, Shigeki, 247-253 Katz, Lee D., 675-679 Kawamatsu, Yutaka, 804-810 Keen, Harry, 92-95*, 466-473 Kehlet, Henrik, 436-438 Keller, U., 387-391 Kemmer, F.W., 26-34 Kennedy, Rebecca, 881-886 Kergoat, Micheline, 445-451 Ketelslegers, Jean-Marie, 1060-1069 Kiesel, Ulrich, 869-871 Kilo, C., 96-100*, 549-556, 557-560 Kitabchi, A.E., 474-477

April, 293-386 May, 387-487 June. 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

Kjellén, Lena, 337-342 Kleinbaum, Jerry, 493-498 Kliegman, R.M., 352-359, 360-367 Knip, Mikael, 743-747 Knowler, William C., 894-899 Kobayashi, Tetsuro, 331-336 Kohen, Cahide, 95-98 Kohen, Elli, 95-98 Kohner, Eva M., 8-13*, 82-87 Koivisto, Veikko A., 88-90, 965-969 Kolb, Hubert, 869-871 Kolterman, Orville G., 627-632 Konijnendijk, W., 124–129, 235–240 Konowitz, Paul, 206–212 Kosaka, Kinori, 331-336 Krasovsky, Joseph, 811-819 Krotkiewski, Marcin, 748-754 Kroustrup, J.P., 79-821 Krupin, Theodore, 505-508 Kumagai, Katsuo, 247-253 Kumar, Dinesh, 516-519 Kuo, Tuan H., 781-787 Kwasowski, Peter, 433-435 Kwok, Simon C.M., 872-875 Kyner, J.L., 91-94

Labbé, Robert F., 1078-1081 Labrie, C., 664-669 Lacy, Paul E., 213-216 Landau, Bernard R., 284-292 Langdon, David R., 1134-1140 Larkins, Richard G., 622-626 Lattimer, Sarah A., 988-992 Lauro, Renato, 1017-1022 Laychock, Susan G., 6-13 Layman, D., 545-548 Lazarchick, John, 876-878 Le Cam, Alphonse, 392-397 Le Marchand-Brustel, Yannick, 392-397 Lear. Seven R., 368-376 Lee, Amy T., 505-508 Lee, Jeri A., 40-46* Lee, Winnie Y.L., 1078-1081 Leiter, Edward H., 148-155 Lernmark, Åke, 460–465, 520–524 Leung, Pearl E., 852–857 Leung, Yin F., 478-481 Levy, Grace, 811-819 Like, A.A., 326-330 Lilja, Bo, 4-7° Lincoln, J., 1075–1077 Lins, Per–Eric, 633–636 Little, Hunter L., 40-46° Loadholt, C.B., 20-25 Logothetopoulos, John, 1172-1176 Lönnroth, Peter, 748-754 Lopes-Virella, Maria F., 20-25 Lopez, Deborah R., 811-819 Lougheed, W.D., 424-432 Lubawy, William C., 846-851 Ludvigsson, Johnny, 520-524

Lumley, J.S.P., 1075-1077 Lyen, Kenneth R., 648-653

Mackintosh, David, 92-95* Madsbad, Sten, 436-438 Maes, Marc, 1060-1069 Majercik, Mary, 213-216 Makoff, R.K., 730–733 Mandel, T.E., 915–920 Maneschi, Franco, 8-13*, 82-87 Marincola, Francesco, 1162-1167 Marks, Vincent, 433-435 Marliss, Errol B., 788-792 Marre, M., 768-773 Marshall, Stephen, 319-325, 697-704 Martin-Dale, H.M., 424-432 Mashiter, Keith, 82-87 Massague, Joan, 541-544 Matheson, C.K., 1117-1125 Matschinsky, Franz M., 1146-1151 Matthews, LeRoy M., 505-508 Matthews, R., 617-621 Mauer, S. Michael, 34-39, 52-55*, 380-382, 948-952 Maury, C. Peter J., 88-90 Mayer, R. John, 130-133 Mayfield, Ronald K., 20-25, 908-914 Mazzone, D., 489–492 McAdam, K.P.W.J., 1092–1101 McCulloch, A.J., 723–729 McDonald, T.L., 1182–1184 McEvoy, Robert C., 67–74, 852–857 McLean, Patricia, 482-485 McMillan, Donald E., 56-63* McNamara, Donald J., 811-819 McVey, Jan, 894-899 Meda, Paolo, 568-574, 858-868 Meglasson, Martin D., 1146-1151 Mehnert, H., 47-51* Melez, Kathleen A., 755-759 Merrell, Ronald, 1162-1167 Michael, Alfred F., 34-39*, 380-382 Michaels, R.L., 858-868 Miettinen, E.L., 352-359, 360-367 Mikamo, Kazuya, 637-643 Mikhailidis, D.P., 217-221 Miles. John M., 197-205 Miller, J., 768-773 Miller, J.D., 439-444 Miller, J.P., 549-556, 557-560 Miner, R.D.G., 313–315 Mintz, D.H., 739–742 Mito, Kazuyo, 343-351 Modert, Christopher W., 654-663 Moeller, Marie, 798-803 Mogensen, C.E., 64-78* Mondon, C.E., 175-180 Monier, Solange, 392-397 Moore, Jorene, 600-604 Moore, Kathleen H., 781-787 Mordes, David B., 876-878

Morse, Harold G., 894-899 Moser, Arthur H., 368–376 Moses, Alan C., 1040–1047 Motolese, Mario, 887-893 Moule, M.L., 760-767 Mullen, Y., 730-733 Münterfering, Horst, 921-931 Murthy, Veeraraghavan K., 718-722 Mustonen, Aki, 743-747 Myers, Bryan D., 40-46*

Nadel, Ethan, 734-738 Nagai, Hideaki, 316-318 Najarian, John S., 948-952 Naylor, B.A., 617–621 Neilson, J.M.M., 101–105 Nelson, Lisa, 734-738 Nelson, Teresita Yap, 1126-1133 Neubauer, H. Paul, 953-958 Nissen, Steven L., 197-205 Nolle, Sandra, 988-992 Nolte, Martha S., 1177-1181 Nomura, Makoto, 788-792 Nyberg, G., 79-82*

0

O'Shea, Geraldine M., 478-481 Obermeier, Rainer, 953-958 Oberwetter, James M., 1126-1133 Ohgaku, Seiji, 284-292 Okamoto, Hiroshi, 316-318 Olack, Barbara J., 532–540 Olefsky, Jerrold M., 541–544, 627–632, 697-704, 1001-1009 Orci, Lelio, 293-301, 858-868, 921-931 Osterby, R., 79-82* Östman, Jan, 117-123, 959-964 Otsuji, Shogo, 585-591 Otsuki, Makoto, 241–246 Owen, Oliver E., 982-987, 1055-1059 Oxenboll, Birgitte, 83-87* Oyedeji, Caroline O., 262-264

Pace, Caroline S., 61-66, 509-515 Parsons, Jonathan A., 67-74 Parving, Hans-Henrik, 83-87* Pasma, A., 235-240 Patel, D.G., 55-60 Paulus, Stephen F., 1035-1039 Pavanich, Gary, 894-899 Peavy, Daniel E., 705-711 Pecoraro, Roger E., 1078-1081 Penman, E., 685-690 Perez, G., 26-34 Perlman, K., 1092-1101

January, 1-100 February, 101-195 March, 197-292

April. 293-386 May, 387-487 June, 489-584

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE Supplement 2, 1-104 July, 585-684 August, 685-780

AUTHOR INDEX 1983

Permutt, M. Alan, 691-696, 777-780 Perrelet. A., 293-301 Perriello, Gabriele, 887-893 Perrin, D., 685-690 Peterson, T., 830-838 Pfeifer, Michael A., 525-531 Phillips, L.S., 1117-1125 Pickup, John, 466-473 Picon, Luc, 445-451 Pictri, Angel O., 75-81, 712-717 Plurad, Santiago B., 532-540 Podlecki, D.A., 697-704 Polonsky, K.S., 398-402 Pongor, Sandor, 1087-1091 Pons, G., 398-402 Poon, Violet, 1177-1181 Porte, Daniel, Jr., 525-531, 943-947 Portha, Bernard, 445-451 Posner, Barry I., 284-292 Pozzilli, P., 91–94 Prager, P., 1083–1086 Procyshyn, A.W., 452-459 Pryor, J.P., 1075-1077 Pyke, D.A., 557-560

Quentel, G., 8-13* Quigley, Carol, 307-312 Quiniou, Marie-Christine, 1048-1054 Qvist, Rajes, 622-626

R

Rabinovitch, Alexander, 95-98, 307-312. 739-742 Radziuk, J., 977-981 Raizes, Gary S., 106-111 Rajotte, R.V., 452-459 Rao, K.S. Jaya, 1168-1171 Rao, R. Harsha, 1168-1171 Rapoport, Stanley, 675-679 Raskin, Philip, 75-81, 712-717 Rate. Robert G., 894-899 Ray, K., 685-690 Ray, Tarun K., 982-987 Reaven, Gerald, 46-50, 165-168. 175-180, 408-411, 600-604 Rechler, Matthew M., 307-312 Reitano, G., 489-492 Reitman, James S., 271-276 Renold, Albert E., 254-261 Revers, Robert R., 627-632 Rhodes, James J., 516-519 Ribes, Gérard, 993-1000 Riddle, M., 545-548 Rimoin, David L., 169–174 Rizza, Robert A., 197–205 Roach, Eileen, 1102–1109

Romeo, M.G., 489-492 Rosen, Stephen G., 825-829 Rosenberg, H., 1182-1184 Rosenthal, Mark, 408-411 Rossetti, Luciano, 1017-1022 Rossini, A.A., 326-330 Rotter, Jerome I., 169-174 Rotwein, Peter S., 691-696, 777-780 Rowold, E., 557-560 Rubenstein, Arthur H., 398-402, 460-465, 872-875 Rubin, Rachel, 169-174

Sadler, T.W., 610-616, 1070-1074 Sai, Pierre, 1048-1054 Sailer, Rudolf, 921-931 Salhanick, Arthur I., 206-212 Salvo, Giuseppe, 1017-1022 Samaan, Naguib A., 262-264 Samoggia, Paola, 1017-1022 Santeusanio, Fausto, 134-141, 887-893 Santiago, Julio V., 403-407 Satoh. Jo. 247-253 Saudek, Christopher D., 811-819 Savino, Wilson, 1048-1054 Sawano, Shinji, 331-336 Schaible, Thomas F., 881-886 Scharp, David W., 532-540, 777-780 Schedl, H.P., 265-270 Scheinman, Jon I., 34-39* Schernthaner, G., 1083-1086 Scheuer, James, 881-886 Schinco, Miren, 1146-1151 Schmidt, Robert E., 532-540, 654-663 Schnell, H., 387-391 Schöne, Hans-Hermann, 953-958 Schramm, W., 47-51* Sehlin, Janove, 820-824 Sens, Donald A., 876-878 Sensi, M., 91-94 Sérusclat, Pierre, 825-829 Shah, Suresh D., 403-407, 825-829 Shamoon, Harry, 493-498 Sharma, A.K., 1152-1161 Sharp, Geoffrey W.G., 993-1000 Sheridan, J.D., 858-868 Sherwin, Robert S., 734-738 Shih, Joyce C., 568-574 Shipp, Joseph C., 718-722 Shocken, Douglas, 106-111 Shrago, E., 793-797 Shultz, L.D., 148-155 Sidenius, Per, 383-386 Siegel, Eberhard G., 993-1000 Sirek, A., 16-34 Sivitz, William I., 568-574 Skor, Donald A., 403-407 Smathers, Patricia A., 755-759 Smidt, Ulla M., 83-87* Smith, Edward B., 825-829

Smith, Joel S., 61-66 Smith, Mike G., 894-899 Smith, Robert M., 648-653, 982-987 Smith, Ulf, 748-754 Sochor, Milena, 482-485 Soeldner, J.S., 549-556, 664-669 Sohda Takashi, 804-810 Solomon, Robert, 175-180, 408-411 Sonnenberg, G.E., 387-391 Sorenson, Robert L., 377-379, 561-567 Soriano, Myrna, 1055-1059 Soubrana, G., 8-13* Spencer, K.M., 91-94 Sperling, M.A., 439-444 Spiliopoulos, A.J., 557-560 Standl, E., 47-515 Stankova, L., 545-548 Stauffacher, W., 387-391 Stefan, Y., 293-301 Steffes, Michael W., 52-55*, 948-952 Steinberg, Alfred D., 755-759 Steiner, Donald F., 872-875 Stentz, F.B., 474-477 Stern, Judith, 46-50 Stocco, Douglas M., 112-116 Stolinski, C., 1152-1161 Stubbs, W.A., 557-560 Sugiyama, Yasuo, 804-810 Sullivan, Francis M., 908-914 Sun, Anthony M., 478-481 Sundkvist, Goran, 4-7* Sutherland, David E.R., 52-55*, 948-952 Suzuki, Ryuji, 247-253 Suzuoki, Ziro, 804-810 Svendsen, Per Aa., 83-87* Swanston-Flatt, Sara K., 433-435 Swenne, Ingemar, 14-19

Tager, Howard S., 872-875 Tai, Joseph, 1185-1187 Takaoka, Yoshiro, 284-292 Taketomi, Shigehisa, 804-810 Tamagawa, Tatsuo, 416-423 Tardella, Laura, 1017-1022 Taskinen, Marja-Ritta, 88-90 Tepperman, Helen M., 412-415 Tepperman, Jay, 412-415 Teppo, Anna-Maija, 88-90 Terasaki, Paul I., 169-174 Thomas, Lorraine, 403-407 Thomas, Mary L., 302-306 Thomas, P.K., 1152-1161 Thomson, A.B.R., 900-907 Tobin, Jordan D., 106-111 Toyota, Takayoshi, 247-253 Travis, P., 101-105 Tronier, Bente, 436-438 Tserng, K.Y., 352-359 Turner, R.C., 617-621 Turtle, John R., 644-647 Tze, Wah Jun, 1185-1187

January, 1-100 February, 101-195 March, 197-292

Robertson, R. Paul, 231-234

Rodman, Harvey M., 156-164, 505-508

DIABETES: VOLUME 32 (1983) PAGE NUMBERS BY ISSUE April. 293-386 May, 387-487 June, 489-584

Supplement 2, 1-104 July, 585-684 August, 685-780

AUTHOR INDEX 1983

Uchigata, Yasuko, 316-318 Underwood, Louis E., 1060–1069 Unger, Roger H., 575–583, 970–973

Vague, Philippe, 88-91* Valentovic, Monica A., 846-851 Valiquette, Nancy, 1172–1176 Van Assche, F.A., 313–315 van Houten, Mark, 284–292 Vasquez, Barbara, 271-276 Vassilopoulou-Sellin, Rena, 262-264 Viberti, Giancarlo, 92-95* Vigg, B.L., 1168-1171 Vittinghus, E., 64-78* Vlassara, Helen, 670-674, 680-684 Vranic, Mladen, 26-34, 633-636

Wagoner, J., 112-116 Wahren, John, 35-45 Wajngot, Alexandre, 633-636 Waltman, Stephen R., 505-508 Ward, G.M., 617-621 Ward, W. Kenneth, 943-947 Warnock, G.L., 452-459 Watson, Sue K., 644-647 Webb, Michael D., 568-574 Weidmann, Peter, 1-5 Weiner, Joseph, 781–787 Weir, Gordon C., 277–283 Westberg, G., 79-82* White, Neil H., 403–407 White, Robert J., 284–292 Widstrom, Anders, 408-411 Wiegman, J.B., 124-129 Wiley, Millie Hughes, 368-376 Williams, Gareth, 466-473 Williams, John A., 241-246, 1102-1109 Williams, Paul F., 644-647 Williams, R. Sanders, 881-886 Williams, Robert C., 774-776 Williamson, J.R., 96-100*, 549-556, 557-560, 1092-1101 Wilson, H.D., 265-270 Winocour, Peter D., 14-19* Wirdnam, P.K., 313-315 Wirth, M., 545-548 Wohltmann, Hulda J., 20-25, 908-914 Wollheim, Claes B., 993-1000 Wolters, G.H.J., 124-129, 235-240 Wongsurawat, Nirandon, 302-306 Woods, H. Frank, 181-191

Wright, Diana, 165-168, 175-180 Wyse, Beatrice M., 830-838, 839-845

Yamamoto, Hiroshi, 316-318 Yaseen, A., 685-690 Yasunami, Yohichi, 213-216 Yip, C.C., 760-767 Yip, Henry K., 654-663 Yki-Järvinen, Hannele, 965-969 Yoon, Ji-Win, 755-759 Yosha, S.F., 739-742 Young, Nancy L., 811–819 Young, Robert J., 142–147, 938–942 Yousufzai, S.Y.K., 793–797 Yue, Dennis K., 644-647

Z

Zawalich, Walter, 1023-1027 Zech, Loren, 271-276 Zeidler, Adina, 516-519 Zenser, Terry V., 302-306 Zimmermann, Horst, 921-931 Zinman, Bernard, 788-792 Zuccarini, O., 91-94

